

# NAComatic

Effective: 23-Sep-2010

Expires: 21-Oct-2010





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MI Min Alt#1 -	6	FNT -	313
MI Min Rdr#1 -	11	FPK -	134
MI Min TO#1 -	14	GDW -	340
13C -	454	GLR -	335
1D2 -	584	GOV -	362
35D -	29	GRR -	349
3CM -	95	HAI -	683
3GM -	342	HTL -	394
3TE -	678	HYX -	634
3TR -	563	IKW -	512
48D -	141	IMT -	413
4D0 -	346	IRS -	673
60G -	303	ISQ -	487
6D6 -	367	IWD -	420
6D9 -	301	JXN -	426
6G0 -	148	JYM -	387
77G -	489	LAN -	460
7D3 -	82	LDM -	476
83D -	670	LWA -	662
8D4 -	666	MBL -	483
9D9 -	385	MBS -	639
9G2 -	472	MCD -	480
ACB -	101	MGN -	381
ADG -	25	MKG -	540
AMN -	33	MNM -	505
ANJ -	651	MOP -	524
APN -	38	MTC -	528
ARB -	48	OEB -	143
AZO -	440	OGM -	566
BAX -	74	ONZ -	285
BEH -	104	OSC -	568
BFA -	116	OZW -	399
BIV -	389	PHN -	620
BTL -	84	PLN -	577
C20 -	111	PTK -	592
C91 -	293	PZQ -	625
CAD -	119	RMY -	500
CFS -	125	RNP -	573
CIU -	653	RQB -	113
CMX -	371	SAW -	493
CVX -	129	SJX -	98
D95 -	470	SLH -	137
D98 -	629	TEW -	502
DET -	152	TTF -	516
DRM -	297	TVC -	686
DTW -	180	VLL -	694
DUH -	458	Y31 -	702
ERY -	558	Y47 -	551
ESC -	305	Y70 -	410
FFX -	330	YIP -	249
FKS -	326	YQG -	282

MI Mins - Alternates #1	-	6	HOUGHTON LAKE	.....	HTL	-	394
MI Mins - Radar #1	-	11	HOWELL	.....	OZW	-	399
MI Mins - Take-Off #1	-	14	IONIA	.....	Y70	-	410
ADRIAN	.....	ADG	-	25	IRON MOUNTAIN-KINGS	IMT	- 413
ALLEGAN	.....	35D	-	29	IRONWOOD	IWD	- 420
ALMA	.....	AMN	-	33	JACKSON	JXN	- 426
ALPENA	.....	APN	-	38	KALAMAZOO	AZO	- 440
ANN ARBOR	.....	ARB	-	48	LAKEVIEW	13C	- 454
BAD AXE	.....	BAX	-	74	LAMBERTVILLE	DUH	- 458
BALDWIN	.....	7D3	-	82	LANSING	LAN	- 460
BATTLE CREEK	.....	BTL	-	84	LAPEER	D95	- 470
BAY CITY	.....	3CM	-	95	LINDEN	9G2	- 472
BEAVER ISLAND	.....	SJX	-	98	LUDINGTON	LDM	- 476
BELLAIRE	.....	ACB	-	101	MACKINAC ISLAND	MCD	- 480
BENTON HARBOR	.....	BEH	-	104	MANISTEE	MBL	- 483
BERRIEN SPRINGS	...	C20	-	111	MANISTIQUE	ISQ	- 487
BIG RAPIDS	.....	RQB	-	113	MARLETTE	77G	- 489
BOYNE FALLS	.....	BFA	-	116	MARQUETTE	SAW	- 493
CADILLAC	.....	CAD	-	119	MARSHALL	RMV	- 500
CARO	.....	CFS	-	125	MASON	TEW	- 502
CHARLEVOIX	.....	CVX	-	129	MENOMINEE	MNM	- 505
CHARLOTTE	.....	FPK	-	134	MIDLAND	IKW	- 512
CHEBOYGAN	.....	SLH	-	137	MONROE	TTF	- 516
CLARE	.....	48D	-	141	MOUNT PLEASANT	MOP	- 524
COLDWATER	.....	OEB	-	143	MT. CLEMENS	MTC	- 528
DAVISON	.....	6G0	-	148	MUSKEGON	MKG	- 540
DETROIT-GROSSE ILE	ONZ	-	285	NEW HUDSON	Y47	-	551
DETROIT	.....	DET	-	152	NEWBERRY	ERY	- 558
DETROIT	.....	DTW	-	180	NILES	3TR	- 563
DETROIT	.....	YIP	-	249	ONTONAGON	OGM	- 566
DETROIT	.....	YQG	-	282	OSCODA	OSC	- 568
DOWAGIAC	.....	C91	-	293	OWOSSO	RNP	- 573
DRUMMOND ISLAND	...	DRM	-	297	PELLSTON	PLN	- 577
EAST TAWAS	.....	6D9	-	301	PLYMOUTH	1D2	- 584
EATON RAPIDS	.....	60G	-	303	PONTIAC	PTK	- 592
ESCANABA	.....	ESC	-	305	PORT HURON	PHN	- 620
FLINT	.....	FNT	-	313	ROGERS CITY	PZQ	- 625
FRANKFORT	.....	FKS	-	326	ROMEO	D98	- 629
FREMONT	.....	FFX	-	330	SAGINAW	HYX	- 634
GAYLORD	.....	GLR	-	335	SAGINAW	MBS	- 639
GLADWIN	.....	GDW	-	340	SAULT STE MARIE	ANJ	- 651
GRAND HAVEN	.....	3GM	-	342	SAULT STE MARIE	CIU	- 653
GRAND LEDGE	.....	4D0	-	346	SOUTH HAVEN	LWA	- 662
GRAND RAPIDS	.....	GRR	-	349	SPARTA	8D4	- 666
GRAYLING	.....	GOV	-	362	ST. IGNACE	83D	- 670
GREENVILLE	.....	6D6	-	367	STURGIS	IRS	- 673
HANCOCK	.....	CMX	-	371	TECUMSEH	3TE	- 678
HARBOR SPRINGS	....	MGN	-	381	THREE RIVERS	HAI	- 683
HASTINGS	.....	9D9	-	385	TRAVERSE CITY	TVC	- 686
HILLSDALE	.....	JYM	-	387	TROY	VLL	- 694
HOLLAND	.....	BIV	-	389	WEST BRANCH	Y31	- 702



INSTRUMENT APPROACH PROCEDURE CHARTS

**A IFR ALTERNATE AIRPORT MINIMUMS**

Standard alternate minimums for non precision approaches are 800-2 (NDB, VOR, LOC, TACAN, LDA, VORTAC, VOR/DME, ASR or WAAS LNAV); for precision approaches 600-2 (ILS or PAR). Airports within this geographical area that require alternate minimums other than standard or alternate minimums with restrictions are listed below. NA - means alternate minimums are not authorized due to unmonitored facility or absence of weather reporting service. Civil pilots see FAR 91. IFR Alternate Airport Minimums: Ceiling and Visibility Minimums not applicable to USA/USN/USAF. Pilots must review the IFR Alternate Airport Minimums Notes for alternate airfield suitability.

**NAME ALTERNATE MINIMUMS**

**ADRIAN, MI**

LENAAWEE COUNTY ..... **RNAV (GPS) Rwy 5**  
**RNAV (GPS) Rwy 23**

NA when local weather not available.

**ALPENA, MI**

ALPENA COUNTY RGNL .. **RNAV (GPS) Rwy 1**  
NA when local weather not available.

**ANN ARBOR, MI**

ANN ARBOR MUNI ..... **RNAV (GPS) Rwy 6<sup>1</sup>**  
**RNAV (GPS) Rwy 24<sup>1</sup>**  
**VOR Rwy 6<sup>2</sup>**  
**VOR Rwy 24<sup>2</sup>**

<sup>1</sup>NA when local weather not available.

<sup>2</sup>NA when control tower closed.

**BAD AXE, MI**

HURON COUNTY  
MEMORIAL ..... **RNAV (GPS) Rwy 4**  
**RNAV (GPS) Rwy 17**  
**RNAV (GPS) Rwy 22**  
**RNAV (GPS) Rwy 35**  
NA when local weather not available.

**BATTLE CREEK, MI**

W.K. KELLOGG ..... **ILS or LOC Rwy 23<sup>1</sup>**  
**RADAR-1<sup>2</sup>**  
**RNAV (GPS) Rwy 5<sup>3</sup>**  
**RNAV (GPS) Rwy 23<sup>3</sup>**  
**VOR or TACAN Rwy 5<sup>4</sup>**  
**VOR Rwy 23<sup>3</sup>**  
**VOR or TACAN or GPS Rwy 31<sup>4</sup>**

<sup>1</sup>NA when control tower closed.

<sup>2</sup>NA when Kalamazoo control tower closed.

<sup>3</sup>NA when local weather not available.

<sup>4</sup>NA when control tower closed except for operators with approved weather reporting service.

**NAME ALTERNATE MINIMUMS**

**BEAVER ISLAND, MI**

BEAVER ISLAND ..... **RNAV (GPS) Rwy 27**  
NA when local weather not available.

**BELLAIRE, MI**

ANTRIM COUNTY ..... **RNAV (GPS) Rwy 2<sup>12</sup>**  
**VOR Rwy 2<sup>3</sup>**

<sup>1</sup>NA when local weather not available.

<sup>2</sup>Category D, 900-2 $\frac{1}{2}$ .

<sup>3</sup>Categories A,B, 1000-2; Category C, 1000-2 $\frac{1}{2}$ ;

Category D, 1000-3.

**BENTON HARBOR, MI**

SOUTHWEST  
MICHIGAN RGNL ..... **RNAV (GPS) Rwy 9**  
**VOR Rwy 9**  
NA when local weather not available.

**CADILLAC, MI**

WEXFORD COUNTY ..... **NDB Rwy 7<sup>13</sup>**  
**NDB Rwy 25<sup>2</sup>**  
**RNAV (GPS) Rwy 7<sup>3</sup>**  
**RNAV (GPS) Rwy 25<sup>3</sup>**

<sup>1</sup>Categories, A, B, 900-2; Category C, 900-2 $\frac{1}{2}$ ;

Category D, 900-2 $\frac{1}{2}$ .

<sup>2</sup>Category D, 800-2 $\frac{1}{2}$ .

<sup>3</sup>NA when local weather not available.

**CARO, MI**

TUSCOLA AREA ..... **RNAV (GPS) Rwy 5**  
**RNAV (GPS) Rwy 23**  
**VOR/DME-A**  
NA when local weather not available.

**CHARLEVOIX, MI**

CHARLEVOIX MUNI ..... **RNAV (GPS) Rwy 9**  
NA when local weather not available.

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# ALTERNATE MINS

M2

NAME ALTERNATE MINIMUMS  
**CHARLOTTE, MI**  
FITCH H BEACH ..... RNAV (GPS) Rwy 20  
NA when local weather not available.

**COLDWATER, MI**  
BRANCH COUNTY  
MEMORIAL ..... RNAV (GPS) Rwy 7  
RNAV (GPS) Rwy 25  
VOR Rwy 7  
VOR/DME Rwy 25  
NA when local weather not available.

**DETROIT, MI**  
COLEMAN A.  
YOUNG MUNI ..... ILS or LOC Rwy 33<sup>1</sup>  
NDB Rwy 15<sup>2</sup>  
RNAV (GPS) Rwy 15<sup>2</sup>  
RNAV (GPS) Rwy 33<sup>2</sup>  
VOR Rwy 33<sup>2</sup>  
  
<sup>1</sup>ILS, 700-2.  
<sup>2</sup>NA when local weather not available.

WILLOW RUN ..... VOR or GPS-A  
Category D, 800-2½.

**DETROIT/GROSSE ILE, MI**  
GROSSE ILE MUNI ..... NDB Rwy 4<sup>1</sup>  
RNAV (GPS) Rwy 4<sup>2</sup>  
RNAV (GPS) Rwy 22<sup>2</sup>  
VOR-A<sup>2</sup>  
  
NA when local weather not available.  
<sup>1</sup>Category A, B, 1000-2; Category C, 1000-2½;  
Category D, 1000-3.  
<sup>2</sup>Category A, B, 900-2; Category C, 900-2½;  
Category D, 900-2½.

**DRUMMOND ISLAND, MI**  
DRUMMOND ISLAND ..... RNAV (GPS) Rwy 8  
RNAV (GPS) Rwy 26  
NA when local weather not available.

**ESCANABA, MI**  
DELTA COUNTY ..... ILS or LOC Rwy 9<sup>1</sup>  
LOC BC Rwy 27<sup>2</sup>  
RNAV (GPS) Rwy 9<sup>23</sup>  
RNAV (GPS) Rwy 27<sup>23</sup>  
VOR Rwy 9<sup>23</sup>  
VOR Rwy 27<sup>23</sup>  
VOR Rwy 36<sup>2</sup>  
  
<sup>1</sup>ILS, Category C, 700-2; Category D, 800-2½.  
LOC, Category D, 800-2½.  
<sup>2</sup>Category D, 800-2½.  
<sup>3</sup>NA when local weather not available.

NAME ALTERNATE MINIMUMS  
**FLINT, MI**  
BISHOP INTL ..... ILS or LOC Rwy 9<sup>1</sup>  
ILS or LOC Rwy 27<sup>12</sup>  
RADAR-1<sup>1</sup>  
RNAV (GPS) Rwy 27<sup>2</sup>  
  
<sup>1</sup>NA when control tower closed.  
<sup>2</sup>NA when local weather not available.

**FRANKFORT, MI**  
FRANKFORT DOW  
MEMORIAL FIELD ..... RNAV (GPS) Rwy 15<sup>1</sup>  
RNAV (GPS) Rwy 33<sup>1</sup>  
VOR/DME-A<sup>2</sup>  
  
NA when local weather not available.  
<sup>1</sup>Category C, 900-2½.  
<sup>2</sup>Categories A, B, 900-2; Category C, 900-2½.

**FREMONT, MI**  
FREMONT MUNI ..... RNAV (GPS) Rwy 18  
RNAV (GPS) Rwy 36  
VOR Rwy 18  
VOR Rwy 36  
NA when local weather not available.

**GAYLORD, MI**  
GAYLORD RGNL ..... ILS or LOC Rwy 9<sup>1</sup>  
VOR or GPS Rwy 9<sup>2</sup>  
VOR or GPS Rwy 27<sup>2</sup>  
  
<sup>1</sup>ILS, Categories B, C, 700-2; Category D,  
800-2½. LOC, Category D, 800-2½.  
<sup>2</sup>Category D, 800-2½.

**GRAND RAPIDS, MI**  
GERALD R. FORD INTL ... ILS or LOC Rwy 8R<sup>1</sup>  
ILS or LOC Rwy 26L<sup>1</sup>  
ILS or LOC Rwy 35<sup>12</sup>  
RADAR-1<sup>3</sup>  
RNAV (GPS) Rwy 8L<sup>1</sup>  
RNAV (GPS) Rwy 8R<sup>1</sup>  
RNAV (GPS) Rwy 17<sup>1</sup>  
RNAV (GPS) Rwy 26L<sup>1</sup>  
RNAV (GPS) Rwy 26R<sup>1</sup>  
RNAV (GPS) Rwy 35<sup>1</sup>  
VOR Rwy 35<sup>1</sup>  
  
<sup>1</sup>NA when local weather not available.  
<sup>2</sup>ILS, Categories A, B, C, 700-2; Category D,  
700-2½. LOC, Category D, 800-2½.  
<sup>3</sup>NA when control tower is closed.

**GRAYLING, MI**  
GRAYLING AAF ..... RNAV (GPS) Rwy 14  
NA when local weather not available.

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# ALTERNATE MINS

M3

NAME ALTERNATE MINIMUMS

## HANCOCK, MI

HOUGHTON

COUNTY MEMORIAL ..... ILS or LOC Rwy 31<sup>12</sup>

LOC/DME BC Rwy 13<sup>23</sup>

RNAV (GPS) Rwy 31<sup>3</sup>

VOR Rwy 25<sup>3</sup>

VOR Rwy 31<sup>3</sup>

<sup>1</sup>ILS, Category D, 700-2¼; LOC, Category D, 800-2¼.

<sup>2</sup>NA when local weather not available.

<sup>3</sup>Category D, 800-2¼.

## HARBOR SPRINGS, MI

HARBOR SPRINGS ..... RNAV (GPS) Rwy 10

RNAV (GPS) Rwy 28

NA when local weather not available.

Category B, 900-2.

## HOLLAND, MI

TULIP CITY ..... RNAV (GPS) Rwy 8

RNAV (GPS) Rwy 26

NA when local weather not available.

## HOUGHTON LAKE, MI

ROSCOMMON COUNTY-

BLODGETT MEMORIAL .... RNAV (GPS) Rwy 9

RNAV (GPS) Rwy 27

NA when local weather not available.

## HOWELL, MI

LIVINGSTON COUNTY

SPENCER J HARDY ..... RNAV (GPS) Rwy 13

RNAV (GPS) Rwy 31

VOR Rwy 31

NA when local weather not available.

## IRON MOUNTAIN-KINGSFORD, MI

FORD ..... RNAV (GPS) Rwy 1

RNAV (GPS) Rwy 19

VOR Rwy 31

NA when local weather not available.

## IRONWOOD, MI

GOGEBIC-

IRON COUNTY ..... RNAV (GPS) Rwy 9

RNAV (GPS) Rwy 27

VOR/DME Rwy 9

VOR/DME Rwy 27

NA when local weather not available.

Category A, B, 900-2; Category C, 900-2½;

Category D, 1000-3.

NAME ALTERNATE MINIMUMS

## JACKSON, MI

JACKSON COUNTY-REYNOLDS

FIELD ..... ILS or LOC Rwy 24<sup>12</sup>

NDB Rwy 24<sup>1</sup>

RNAV (GPS) Rwy 6<sup>3</sup>

RNAV (GPS) Rwy 14<sup>3</sup>

RNAV (GPS) Rwy 24<sup>3</sup>

RNAV (GPS) Rwy 32<sup>3</sup>

VOR Rwy 6<sup>3</sup>

VOR Rwy 14<sup>3</sup>

VOR Rwy 32<sup>3</sup>

VOR/DME Rwy 24<sup>3</sup>

<sup>1</sup>NA when control tower closed.

<sup>2</sup>ILS, Category D, 700-2.

<sup>3</sup>NA when local weather not available.

## KALAMAZOO, MI

KALAMAZOO/BATTLE CREEK

INTL ..... ILS or LOC Rwy 35<sup>1</sup>

LOC BC Rwy 17<sup>1</sup>

NDB Rwy 35<sup>1</sup>

RADAR-1<sup>1</sup>

VOR Rwy 5<sup>12</sup>

VOR Rwy 23<sup>3</sup>

<sup>1</sup>NA when control tower closed.

<sup>2</sup>Category D, NA.

<sup>3</sup>NA when control tower closed, except for operators with approved weather reporting service.

## LUDINGTON, MI

MASON COUNTY ..... RNAV (GPS) Rwy 8

RNAV (GPS) Rwy 26

NA when local weather not available.

## MANISTEE, MI

MANISTEE

COUNTY-BLACKER ..... ILS or LOC Rwy 27

ILS, Category D, 700-2¼. LOC, Category D, 800-2¼.

## MARQUETTE, MI

SAWYER INTL ..... ILS or LOC Rwy 1<sup>1</sup>

RNAV (GPS) Rwy 19<sup>2</sup>

<sup>1</sup>LOC, NA.

<sup>2</sup>NA when local weather not available.

## MENOMINEE, MI

MENOMINEE-MARINETTE

TWIN COUNTY ..... RNAV (GPS) Rwy 3

RNAV (GPS) Rwy 21

RNAV (GPS) Rwy 32

VOR-A

NA when local weather not available.

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# ALTERNATE MINS

M4

NAME ALTERNATE MINIMUMS  
**MIDLAND, MI**  
 JACK BARSTOW ..... RNAV (GPS) Rwy 6  
    RNAV (GPS) Rwy 24  
    VOR-A  
 NA when local weather not available.

**MONROE, MI**  
 CUSTER ..... RNAV (GPS) Rwy 3  
    RNAV (GPS) Rwy 21  
    VOR Rwy 31  
    VOR Rwy 21  
 NA when local weather not available.  
 1Category D, 800-2¼.

**MOUNT PLEASANT, MI**  
 MOUNT PLEASANT MUNI RNAV (GPS) Rwy 9  
    RNAV (GPS) Rwy 27  
    VOR Rwy 27  
 NA when local weather not available.

**MUSKEGON, MI**  
 MUSKEGON COUNTY .... ILS or LOC Rwy 24<sup>12</sup>  
    ILS or LOC Rwy 32<sup>1</sup>  
    LOC BC Rwy 14<sup>12</sup>  
    RNAV (GPS) Rwy 6<sup>2</sup>  
    RNAV (GPS) Rwy 14<sup>2</sup>  
    RNAV (GPS) Rwy 24<sup>2</sup>  
    RNAV (GPS) Rwy 32<sup>2</sup>  
    VOR-A<sup>1</sup>  
 1NA when control tower closed.  
 2NA when local weather not available.

**NEWBERRY, MI**  
 LUCE COUNTY ..... RNAV (GPS) Rwy 11  
    RNAV (GPS) Rwy 29  
 NA when local weather not available.

**OSCODA, MI**  
 OSCODA-WURTSMITH .... RNAV (GPS) Rwy 6  
    RNAV (GPS) Rwy 24  
 NA when local weather not available.

**OWOSSO, MI**  
 OWOSSO COMMUNITY . RNAV (GPS) Rwy 10  
    RNAV (GPS) Rwy 28  
    VOR/DME Rwy 28  
 NA when local weather not available.

NAME ALTERNATE MINIMUMS  
**PELLSTON, MI**  
 PELLSTON RGNL AIRPORT OF  
 EMMET COUNTY ..... ILS or LOC Rwy 32<sup>12</sup>  
    RNAV (GPS) Rwy 5<sup>13</sup>  
    RNAV (GPS) Rwy 23<sup>14</sup>  
    RNAV (GPS) Rwy 32<sup>14</sup>  
    VOR/DME Rwy 5<sup>3</sup>  
    VOR Rwy 23<sup>14</sup>

1NA when local weather not available.  
 2ILS, Category D, 700-2¼. LOC, Category D, 800-2¼.  
 3Categories A,B, 900-2; Category C, 900-2¼; Category D, 900-2¼.  
 4Category D, 800-2¼.

**PONTIAC, MI**  
 OAKLAND COUNTY  
 INTL ..... ILS or LOC Rwy 9R<sup>12</sup>  
    LOC BC Rwy 27L<sup>1</sup>  
    RNAV (GPS) Rwy 9R<sup>3</sup>  
    RNAV (GPS) Rwy 27L<sup>3</sup>  
    VOR Rwy 9R<sup>3</sup>  
    VOR Rwy 27L<sup>3</sup>

1NA when control tower closed.  
 2ILS, LOC, Categories A, B, C, D, 700-2.  
 3NA when local weather not available.

**SAGINAW, MI**  
 SAGINAW COUNTY  
 H W BROWNE ..... ILS or LOC/DME Rwy 27  
    RNAV (GPS) Rwy 9<sup>1</sup>  
    RNAV (GPS) Rwy 27  
 NA when local weather not available.  
 1Category C, 800-2¼.

MBS INTL ..... ILS or LOC Rwy 5<sup>1</sup>  
    ILS or LOC Rwy 23<sup>2</sup>  
    RADAR-1<sup>1</sup>  
    RNAV (GPS) Rwy 5<sup>3</sup>  
    RNAV (GPS) Rwy 14<sup>3</sup>  
    RNAV (GPS) Rwy 23<sup>3</sup>  
    RNAV (GPS) Rwy 32<sup>3</sup>  
    VOR Rwy 5<sup>4</sup>  
    VOR Rwy 14<sup>4</sup>  
    VOR Rwy 32<sup>4</sup>

1NA when control tower closed.  
 2DME or radar required; NA when control tower closed.  
 3NA when local weather not available.  
 4NA for NON-DME equipped aircraft when control tower closed.

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NAME ALTERNATE MINIMUMS

## SAULT STE MARIE, MI

CHIPPEWA

COUNTY INTL ..... RNAV (GPS) Rwy 16  
RNAV (GPS) Rwy 34  
VOR-A<sup>1</sup>

NA when local weather not available.

<sup>1</sup>DME standard, ADF NA.

## SOUTH HAVEN, MI

SOUTH HAVEN

AREA RGNL ..... RNAV (GPS) Rwy 4  
RNAV (GPS) Rwy 22  
VOR Rwy 22

NA when local weather not available.

## SPARTA, MI

PAUL C MILLER-

SPARTA ..... RNAV (GPS) Rwy 7  
RNAV (GPS) Rwy 25  
VOR-A

NA when local weather not available.

## STURGIS, MI

KIRSCH MUNI ..... RNAV (GPS) Rwy 18  
RNAV (GPS) Rwy 36

NA when local weather not available.

Category D, 800-2¼.

## TRAVERSE CITY, MI

CHERRY CAPITAL ..... ILS Rwy 28<sup>12</sup>  
NDB or GPS Rwy 28<sup>23</sup>  
RNAV (GPS) Rwy 10<sup>45</sup>  
VOR or TACAN or GPS-A<sup>3</sup>

<sup>1</sup>ILS, Categories A,B, 800-2; Category C,  
800-2¼; Category D, 800-2½. LOC,Category  
C, 800-2¼; Category D, 800-2½.

<sup>2</sup>NA when control tower closed.

<sup>3</sup>Category C, 800-2¼, Category D, 800-2½.

<sup>4</sup>Categories A, B, 1400-2; Categories C, D,  
1400-3.

<sup>5</sup>NA when local weather not available.

## WEST BRANCH, MI

WEST BRANCH

COMMUNITY ..... RNAV (GPS) Rwy 9<sup>1</sup>  
RNAV (GPS) Rwy 27

NA when local weather not available.

<sup>1</sup>Category C, 800-2¼; Category D, 800-2½.

# RADAR MINS



10238

## RADAR INSTRUMENT APPROACH MINIMUMS

### BATTLE CREEK, MI W. K. KELLOGG

Amdt. 2, DEC 13, 1990 (FAA)

ELEV 952

RADAR - 119.2 340.9  

	RWY	GS/TCH/RPI	CAT	DA/ MDA-VIS	HAT/ HATH/ HAA	CEIL-VIS	CAT	DA/ MDA-VIS	HAT/ HATH/ HAA	CEIL-VIS
CIRCLING			A	<b>1420</b> -1	468	(500-1)	B	<b>1440</b> -1	488	(500-1)
			C	<b>1480</b> -1½	528	(600-1½)	D	<b>1520</b> -2	568	(600-2)
			E	<b>1740</b> -2¾	788	(800-2¾)				



When Kalamazoo control tower closed, procedure not authorized.

When Battle Creek control tower closed, use Kalamazoo altimeter setting and increase all MDA's 60 feet and Category E visibility ¼ mile.

### FLINT, MI BISHOP INTL

Amdt. 8A, APR 13, 2006 (FAA)

ELEV 782

RADAR - 118.8 257.9  



	RWY	GS/TCH/RPI	CAT	DA/ MDA-VIS	HAT/ HATH/ HAA	CEIL-VIS	CAT	DA/ MDA-VIS	HAT/ HATH/ HAA	CEIL-VIS
ASR	36		ABC	<b>1180</b> -1	398	(400-1)	D	<b>1180</b> -1½	398	(400-1½)
	18		AB	<b>1300</b> -1	523	(600-1)	C	<b>1300</b> -1½	523	(600-1½)
			D	<b>1300</b> -1¾	523	(600-1¾)				
CIRCLING	27		ABC	<b>1240</b> -¾	470	(500-¾)	D	<b>1240</b> -1	470	(500-1)
			AB	<b>1300</b> -1	518	(600-1)	C	<b>1300</b> -1½	518	(600-1½)
			D	<b>1340</b> -2	558	(600-2)				

CAUTION: Brightly lighted parking lot 4000' E of approach end of rwy 27 can easily be confused for rwy 27.  
For inoperative MALSR, increase ASR Rwy 27 Categories A and B visibility to 1.

### GRAND RAPIDS, MI GERALD R. FORD INTL

Amdt. 10C, AUG 26, 2010 (FAA)

ELEV 794

RADAR - 128.4 257.6  

	RWY	GS/TCH/RPI	CAT	DA/ MDA-VIS	HAT/ HATH/ HAA	CEIL-VIS	CAT	DA/ MDA-VIS	HAT/ HATH/ HAA	CEIL-VIS
ASR	26L		ABC	<b>1100</b> /24	310	(400-½)	D	<b>1100</b> /50	310	(400-1)
	26R		AB	<b>1280</b> -1	493	(500-1)	C	<b>1280</b> -1½	493	(500-1½)
			D	<b>1280</b> -1½	493	(500-1½)				
	8R		AB	<b>1200</b> -½	406	(500-½)	C	<b>1200</b> -¾	406	(500-¾)
			D	<b>1200</b> -1	406	(500-1)				
	8L		AB	<b>1220</b> -1	433	(500-1)	C	<b>1220</b> -1½	433	(500-1½)
CIRCLING			D	<b>1220</b> -1½	433	(500-1½)				
			AB	<b>1280</b> -1	486	(500-1)	C	<b>1280</b> -1½	486	(500-1½)
			D	<b>1360</b> -2	566	(600-2)				

When control tower closed, ASR not authorized.

EC-1

## RADAR INSTRUMENT APPROACH MINIMUMS

### RADAR MINS

10238

N1

23 SEP 2010 to 21 OCT 2010

23 SEP 2010 to 21 OCT 2010



## RADAR INSTRUMENT APPROACH MINIMUMS

## KALAMAZOO, MI

Amdt. 9, OCT 25, 2007 (FAA)

ELEV 874

## KALAMAZOO/BATTLE CREEK INTL

RADAR-1 121.2 340.9 

	RWY	GS/TCH/RPI	CAT	DA/ MDA-VIS	HAT/ HATH/ HAA	CEIL-VIS	CAT	DA/ MDA-VIS	HAT/ HATH/ HAA	CEIL-VIS
ASR	35		AB	<b>1280</b> /24	412	(500-½)	C	<b>1280</b> /40	412	(500-¾)
			D	<b>1280</b> /50	412	(500-1)				
	17		AB	<b>1320</b> -1	453	(500-1)	C	<b>1320</b> -1½	453	(500-1¼)
			D	<b>1320</b> -1½	453	(500-1½)				
CIRCLING			AB	<b>1380</b> -1	506	(600-1)	C	<b>1380</b> -1½	506	(600-1½)
			D	<b>1440</b> -2	566	(600-2)				

For inoperative MALSR, increase S-35 Cat D visibility to RVR 6000.  
When control tower closed, ASR NA.

## LANSING, MI

Amdt. 15, APR 8, 2010 (FAA)

ELEV 861

## CAPITAL REGION INTL

RADAR - 118.65 133.475 226.4 

	RWY	GS/TCH/RPI	CAT	DA/ MDA-VIS	HAT/ HATH/ HAA	CEIL-VIS	CAT	DA/ MDA-VIS	HAT/ HATH/ HAA	CEIL-VIS
ASR	10R		ABC	<b>1260</b> /24	399	(400-½)	D	<b>1260</b> /50	399	(400-1)
			AB	<b>1320</b> /24	469	(500-½)				
			D	<b>1320</b> /50	469	(500-1)				
	6		AB	<b>1320</b> -1	462	(500-1)	C	<b>1320</b> -1½	462	(500-1¼)
			D	<b>1320</b> -1½	462	(500-1½)				
CIRCLING	24		AB	<b>1260</b> -1	403	(400-1)	CD	<b>1260</b> -1½	403	(400-1¼)
			AB	<b>1380</b> -1	519	(600-1)				
			D	<b>1440</b> -2	579	(600-2)				

For inoperative MALSR, increase S-10R Cat D visibility to RVR 6000.  
Visibility reduction by helicopters NA for Rwy 6, and Rwy 24.  
Lost Communications (All Rwys): As directed by ATC on initial contact.

EC-1

## RADAR INSTRUMENT APPROACH MINIMUMS

## RADAR MINS

## RADAR INSTRUMENT APPROACH MINIMUMS

## MUSKEGON, MI

Amdt. 15, JUN 3, 2010 (FAA)

ELEV 629

## MUSKEGON COUNTY

RADAR - 119.8 339.1 ▽

		DA/ MDA-VIS	HAT/ HATH/ HAA	CEIL-VIS			DA/ MDA-VIS	HAT/ HATH/ HAA	CEIL-VIS
ASR	6	AB	<b>1140</b> -1	517 (600-1)	C	<b>1140</b> -1½	517	(600-1½)	
		D	<b>1140</b> -1¾	517 (600-1¾)					
	14	AB	<b>1080</b> -1	453 (500-1)	C	<b>1080</b> -1¾	453	(500-1¾)	
		D	<b>1080</b> -1½	453 (500-1½)					
	24	ABC	<b>1040</b> -¾	413 (500-¾)	D	<b>1040</b> -1	413 (500-1)		
	32	AB	<b>1100</b> /24	471 (500-½)	C	<b>1100</b> /40	471	(500-¾)	
		D	<b>1100</b> /50	471 (500-1)					
CIRCLING		AB	<b>1140</b> -1	511 (600-1)	C	<b>1140</b> -1½	511	(600-1½)	
		D	<b>1200</b> -2	571 (600-2)					

## MISSED APPROACH INSTRUCTIONS:

RWY 6: Climb to 2500 then right turn direct MKG VORTAC and hold E, RT, 270° inbound.

RWY 14: Climb to 2500 then left turn direct MKG VORTAC and hold E, RT, 270° inbound.

RWY 24: Climb to 2500 then left turn direct MKG VORTAC and hold E, RT, 270° inbound.

RWY 32: Climb to 2500 then right turn direct MKG VORTAC and hold E, RT, 270° inbound.

Procedure NA when Muskegon Approach Control closed.

For inoperative MALSR increase S-24 visibility Cat A, B, and D ¼ mile.

Visibility reduction by helicopters NA.

Lost communications (All Rwy): As directed by ATC on initial contact.

## SAGINAW, MI

Amdt. 9, AUG 1, 1985 (FAA)

ELEV 668

## MBS INTL

RADAR - 120.95 126.45 235.625 ▽ ▲

	RWY	GS/TCH/RPI	CAT	DA/ MDA-VIS	HAT/ HATH/ HAA	CEIL-VIS	CAT	DA/ MDA-VIS	HAT/ HATH/ HAA	CEIL-VIS
ASR	23		ABC	<b>1020</b> -½	359	(400-½)	D	<b>1020</b> -1	359	(400-1)
	5		ABC	<b>1060</b> /24	394	(400-½)				
CIRCLING			A	<b>1100</b> -1	432	(500-1)	B	<b>1120</b> -1	452	(500-1)
			C	<b>1120</b> -1½	452	(500-1½)				

Category D S-5 visibility increased to RVR 6000 for inoperative SSALR.

Category D S-23 visibility increased ¼ mile for inoperative MALSR.

When control tower not in operation, procedure NA.

EC-1

## RADAR INSTRUMENT APPROACH MINIMUMS

## RADAR MINS

# IFR TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

## Civil Airports and Selected Military Airports

ALL USERS: Airports that have Departure Procedures (DPs) designed specifically to assist pilots in avoiding obstacles during the climb to the minimum enroute altitude, and/or airports that have civil IFR take-off minimums other than standard, are listed below. Take-off Minimums and Departure Procedures apply to all runways unless otherwise specified. Altitudes, unless otherwise indicated, are minimum altitudes in MSL.

DPs specifically designed for obstacle avoidance are referred to as Obstacle Departure Procedures (ODPs) and are described below in text, or published separately as a graphic procedure. If the (Obstacle) DP is published as a graphic procedure, its name will be listed below, and it can be found in either this volume (civil), or a separate Departure Procedure volume (military), as appropriate. Users will recognize graphic obstacle DPs by the term "(OBSTACLE)" included in the procedure title; e.g., TETON TWO (OBSTACLE). If not assigned a SID or radar vector by ATC, an ODP may be flown without ATC clearance to ensure obstacle clearance.

Graphic DPs designed by ATC to standardize traffic flows, ensure aircraft separation and enhance capacity are referred to as "Standard Instrument Departures (SIDs)". SIDs also provide obstacle clearance and are published under the appropriate airport section. ATC clearance must be received prior to flying a SID.

CIVIL USERS NOTE: Title 14 Code of Federal Regulations Part 91 prescribes standard take-off rules and establishes take-off minimums for certain operators as follows: (1) Aircraft having two engines or less - one statute mile. (2) Aircraft having more than two engines - one-half statute mile. These standard minima apply in the absence of any different minima listed below.

MILITARY USERS NOTE: Civil (nonstandard) take-off minima are published below. For military take-off minima, refer to appropriate service directives.

### NAME TAKE-OFF MINIMUMS

#### ADRIAN, MI

LENAAWEE COUNTY (ADG)

ORIG 07130 (FAA)

TAKE-OFF MINIMUMS: **Rwys 11, 29**, NA-ATC.

NOTE: **Rwy 5**, multiple trees beginning 1837' from departure end of runway, 149' left of centerline, up to 75' AGL/873' MSL. Multiple trees beginning 953' from departure end of runway, 146' right of centerline, up to 74' AGL/872' MSL. **Rwy 23**, tree 1231' from departure end of runway, 633' left of centerline, 55' AGL/849' MSL.

#### ALLEGAN, MI

PADGHAM FIELD (35D)

AMDT 2 10042 (FAA)

TAKE-OFF MINIMUMS: **Rwys 15, 33**, NA-Environmental.

DEPARTURE PROCEDURE: **Rwy 11**, climb heading 103° to 1200 before turning right.

NOTE: **Rwy 11**, multiple trees beginning 46' from DER, 10' left of centerline, up to 97' AGL/806' MSL. Multiple trees beginning 1' from DER, 2' right of centerline, up to 100' AGL/794' MSL. **Rwy 29**, multiple trees beginning 37' from DER, 4' left of centerline, up to 83' AGL/802' MSL. Multiple trees beginning 22' from DER, 20' right of centerline, up to 84' AGL/803' MSL.

### NAME TAKE-OFF MINIMUMS

#### ALMA, MI

GRATIOT COMMUNITY (AMN)

ORIG 10042 (FAA)

TAKE-OFF MINIMUMS: **Rwy 9**, 400-3 or std. w/min. climb of 251' per NM to 1400.

NOTE: **Rwy 9**, multiple trees beginning 841' from DER, 438' right of centerline, up to 58' AGL/817' MSL. Multiple trees beginning 1383' from DER, 380' left of centerline, up to 71' AGL/820' MSL. **Rwy 18**, multiple trees beginning 1067' from DER, 152' right of centerline, up to 70' AGL/829' MSL. Multiple trees beginning 923' from DER, 374' left of centerline, up to 70' AGL/824' MSL. **Rwy 27**, multiple trees beginning 306' from DER, 272' right of centerline, up to 81' AGL/840' MSL. Multiple trees beginning 1168' from DER, 593' left of centerline, up to 93' AGL/852' MSL. **Rwy 36**, multiple trees beginning 239' from DER, 3' right of centerline, up to 86' AGL/845' MSL. Multiple trees beginning 143' from DER, 38' left of centerline, up to 103' AGL/852' MSL.



## ALPENA, MI

ALPENA COUNTY RGNL (APN)

ORIG 09015 (FAA)

NOTE: **Rwy 1**, tree 2293' from departure end of runway, 525' left of centerline, 100' AGL/749' MSL. **Rwy 7**, trees beginning 858' from departure end of runway, 567' right of centerline up to 100' AGL/774' MSL. Trees beginning 1059' from departure end of runway, 166' left of centerline up to 100' AGL/769' MSL. **Rwy 19**, trees beginning 1789' from departure end of runway, 270' left of centerline up to 100' AGL/779' MSL. Trees beginning 1049' from departure end of runway, 777' right of centerline up to 100' AGL/789' MSL. Vent on cable 44' from departure end of runway, 147' left of centerline up to 25' AGL/685' MSL. **Rwy 25**, trees beginning 652' from departure end of runway, 53' left of centerline up to 100' AGL/755' MSL. Trees beginning 1021' from departure end of runway, 275' right of centerline up to 100' AGL/751' MSL.

## ANN ARBOR, MI

ANN ARBOR MUNI (ARB)

AMDT 8 07354 (FAA)

TAKE-OFF MINIMUMS: **Rwys 12, 30, NA**-  
Environmental.

NOTE: **Rwy 6**, multiple trees beginning 442' from departure end of runway, 47' right of centerline, up to 79' AGL/899' MSL. Building 312' from departure end of runway, 479' right of centerline, 15' AGL/838' MSL. Multiple trees beginning 635' from departure end of runway, 182' left of centerline, up to 59' AGL/887' MSL. Building 99' from departure end of runway, 351' left of centerline, 22' AGL/849' MSL. **Rwy 24**, multiple trees beginning 479' from departure end of runway, 473' left of centerline, up to 100' AGL/929' MSL. Multiple trees beginning 462' from departure end of runway, 486' right of centerline, up to 50' AGL/885' MSL. Terrain 138' from departure end of runway, 475' right of centerline, 0' AGL/837' MSL.

## BAD AXE, MI

HURON COUNTY MEMORIAL (BAX)

AMDT 4 07354 (FAA)

NOTE: **Rwy 4**, vehicle on road 244' from departure end of runway, 531' left of centerline, 15' AGL/774' MSL. Tree 810' from departure end of runway, 43' left of centerline, 100' AGL/859' MSL. Vehicle on road 223' from departure end of runway, 470' right of centerline, 15' AGL/774' MSL. **Rwy 17**, vehicle on road 164' from departure end of runway, on centerline, 15' AGL/784' MSL. Bush 81' from departure end of runway, 497' right of centerline, 4' AGL/757' MSL. Railroad 695' from departure end of runway, 684' right of centerline, 23' AGL/792' MSL. Terrain beginning 222' from departure end of runway, 70' right of centerline, 0' AGL/757' MSL. Trees beginning 855' from departure end of runway, 392' right of centerline, up to 100' AGL/879' MSL. Pole 1135' from departure end of runway, 755' left of centerline, 35' AGL/798' MSL. Terrain beginning 44' from departure end of runway, 9' left of centerline, 0' AGL/765' MSL. Trees beginning 1693' from departure end of runway, 372' left of centerline, up to 100' AGL/859' MSL. **Rwy 22**, terrain beginning 3' from departure end of runway, 172' left of centerline, 0' AGL/765' MSL. Tree 2334' from departure end of runway, 422' left of centerline, 100' AGL/869' MSL. Terrain beginning 49' from departure end of runway, 165' right of centerline, 0' AGL/762' MSL. Railroad 41' from departure end of runway, 390' right of centerline, 23' AGL/782' MSL. **Rwy 35**, antenna on tower 355' from departure end of runway, 478' right of centerline, 34' AGL/793' MSL. Antenna 359' from departure end of runway, 477' right of centerline, 30' AGL/793' MSL. Vehicle on road 575' from departure end of runway, 412' right of centerline, 15' AGL/778' MSL. Trees beginning 1259' from departure end of runway, 53' right of centerline, up to 100' AGL/842' MSL. Trees beginning 1509' from departure end of runway, 375' left of centerline, up to 100' AGL/859' MSL. Tower 1085' from departure end of runway, 698' left of centerline, 63' AGL/822' MSL.

## BALDWIN, MI

BALDWIN MUNI (7D3)

ORIG 84075 (FAA)

TAKE-OFF MINIMUMS: **Rwys 5, 9, 23, 27**, 300-1.

## BATTLE CREEK, MI

W. K. KELLOGG (BTL)

AMDT 2 91346 (FAA)

TAKE-OFF MINIMUMS: **Rwys 13, 31**, 300-1.

DEPARTURE PROCEDURE: **Rwy 31**, climb runway heading to 1400 before turning.

## BAY CITY, MI

JAMES CLEMENTS MUNI (3CM)

AMDT 5 86128 (FAA)

TAKE-OFF MINIMUMS: **Rwys 9, 18, 23, 27, 36**, 300-1.

**Rwy 5**, 900-2.

DEPARTURE PROCEDURE: **Rwys 23, 27, 36**, climb runway heading to 2100 before turning. **Rwy 9**, left turn climb heading 070° to 2100 before turning. **Rwy 5**, right turn climb heading 070° to 2100 before turning. **Rwy 18**, right turn climb heading 230° to 2100 before turning.

## BEAVER ISLAND, MI

BEAVER ISLAND (SJC)

ORIG 98001 (FAA)

TAKE-OFF MINIMUMS: **Rwys 9,27**, 300-1.

**Rwys 5,14,23,32**, NA.

## BELLAIRE, MI

ANTRIM COUNTY (ACB)

AMDT 6 06215 (FAA)

TAKE-OFF MINIMUMS: **Rwy 2**, 700-3 or std. w/ a min. climb of 417' per NM to 1500.

DEPARTURE PROCEDURE: **Rwy 2**, climb heading 022° to 1200 before turning right. **Rwy 20**, climb heading 202° to 1300 before turning left.

NOTE: **Rwy 2**, road 385' from departure end of runway, 528' right of centerline, 15' AGL/646' MSL. Multiple trees beginning 2535' from departure end of runway, 96' left of centerline, up to 100' AGL/884' MSL. Multiple trees beginning 406' from departure end of runway, 235' right of centerline, up to 100' AGL/1147' MSL. Tower 2.57 NM from departure end of runway, 3271' right of centerline, 168' AGL/1198' MSL.

**Rwy 20**, multiple trees beginning 64' from departure end of runway, 204' right of centerline up to 100' AGL/693' MSL. Multiple buildings and antenna on tower beginning 2641' from departure end of runway, 909' right of centerline, up to 121' AGL/721' MSL. Multiple trees beginning 125' from departure end of runway, 220' left of centerline, up to 100' AGL/720' MSL.

## BENTON HARBOR, MI

SOUTHWEST MICHIGAN RGNL (BEH)

AMDT 6 10070 (FAA)

TAKE-OFF MINIMUMS: **Rwy 31**, 300-1½ or std. w/a min. climb of 283' per NM to 900.

NOTE: **Rwy 9**, trees beginning 535' from DER, 409' right of centerline, up to 100' AGL/729' MSL. Tree 2414' from DER, 803' left of centerline, 69' AGL/708' MSL. Fence beginning 175' from DER, 484' right of centerline, up to 7' AGL/656' MSL. **Rwy 13**, trees beginning 727' from DER, 75' right of centerline, up to 100' AGL/695' MSL. Pole 895' from DER, 216' right of centerline, 22' AGL/671' MSL. Trees beginning 1135' from DER, 59' left of centerline, up to 100' AGL/769' MSL. **Rwy 18**, trees beginning 715' from DER, 60' right of centerline, up to 97' AGL/727' MSL. Pole 576' from DER, 266' right of centerline, 25' AGL/652' MSL. Tree 1317' from DER, 171' left of centerline, 70' AGL/694' MSL. **Rwy 27**, trees beginning 58' from DER, 301' right of centerline, up to 100' AGL/744' MSL. Obstruction light on LOC 66' from DER, 43' right of centerline, 10' AGL/631' MSL. Pole 146' from DER, 312' left of centerline, 49' AGL/663' MSL. Rod 144' from DER, 312' left of centerline, 48' AGL/662' MSL. Trees beginning 130' from DER, 87' left of centerline, up to 100' AGL/689' MSL. Building 106' from DER, 262' left of centerline, 20' AGL/644' MSL. Obstruction light on LOC 66' from DER, on centerline, 10' AGL/630' MSL. **Rwy 31**, trees beginning 809' from DER, 62' right of centerline, up to 100' AGL/819' MSL. Transmission tower 2164' from DER, 108' left of centerline, 73' AGL/703' MSL. Transmission tower 2221' from DER, 389' right of centerline, 75' AGL/694' MSL. Tree beginning 1103' from DER, 164' left of centerline, up to 100' AGL/769' MSL. **Rwy 36**, trees beginning 107' from DER, 54' right of centerline, up to 95' AGL/710' MSL. Tree 106' from DER, 53' left of centerline, 30' AGL/637' MSL. Transmission tower 2661' from DER, 103' left of centerline, 102' AGL/711' MSL.

## BERRIEN SPRINGS, MI

ANDREW UNIVERSITY AIRPARK (C20)

ORIG 03023 (FAA)

TAKE-OFF MINIMUMS: **Rwys 3, 13, 21**, NA. **Rwy 31**, 700-1½ or std. with a min. climb of 260' per NM to 1500. NA at night.

NOTE: **Rwy 31**, tower 6789' northeast of departure end of runway, 565' AGL/1224' MSL.

## BIG RAPIDS, MI

ROBEN-HOOD (RQB)

AMDT 5 96116 (FAA)

TAKE-OFF MINIMUMS: **Rwys 14, 27**, 300-1.

## BOYNE FALLS, MI

BOYNE MOUNTAIN (BFA)

AMDT 3 96340 (FAA)

TAKE-OFF MINIMUMS: **Rwy 17**, 1000-1. **Rwy 35**, 500-1.

DEPARTURE PROCEDURE: **Rwys 17, 35**, climb runway heading to 2000 before turning.

## CADILLAC, MI

WEXFORD COUNTY (CAD)

AMDT 7 09183 (FAA)

TAKE-OFF MINIMUMS: **Rwys 18, 36**, NA-Environmental.

DEPARTURE PROCEDURE: **Rwy 25**, climb heading 250° to 1800 before turning left.

NOTE: **Rwy 7**, trees beginning 783' from DER, 129' right of centerline, up to 53' AGL/1348' MSL. Trees beginning 849' from DER, 348' left of centerline, up to 74' AGL/1378' MSL. Poles beginning 1221' from DER, 596' left of centerline, up to 30' AGL/1336' MSL. Poles beginning 1228' from DER, 366' right of centerline, up to 38' AGL/1333' MSL. Train and tracks 1386' from DER, 819' left of centerline, 23' AGL/1335' MSL. **Rwy 25**, bush 14' from DER, 275' right of centerline, 10' AGL/1317' MSL. Vehicle and road 660' from DER, 623' left of centerline, 15' AGL/1327' MSL.

## CARO, MI

TUSCOLA AREA (CFS)

AMDT 1 08325 (FAA)

TAKE-OFF MINIMUMS: **Rwys 12, 30**, NA-Environmental.

NOTE: **Rwy 5**, vehicle on highway 2163' from departure end of runway, 648' left of centerline, 17' AGL/786' MSL. Trees beginning 865' from departure end of runway, 248' right of centerline, up to 100' AGL/809' MSL. **Rwy 23**, trees beginning 990' from departure end of runway, 581' right of centerline, up to 100' AGL/789' MSL.

## CHARLEVOIX, MI

CHARLEVOIX MUNI (CVX)

AMDT 4 05020 (FAA)

TAKE-OFF MINIMUMS: **Rwys 4, 22**, N/A.

NOTES: **Rwy 9**, terrain beginning at departure end of runway, left and right of centerline up to 660' MSL. **Rwy 27**, terrain beginning at departure end of runway, left and right of centerline up to 693' MSL.

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## CHARLOTTE, MI

FITCH H. BEACH (FPK)

AMDT 2 92065 (FAA)

TAKE-OFF MINIMUMS: **Rwys 2, 14, 20, 32, 300-1.**

DEPARTURE PROCEDURE: **Rwy 20**, climb runway heading to 1500 before turning.

## CHEBOYGAN, MI

CHEBOYGAN COUNTY (SLH)

AMDT 3 86156 (FAA)

TAKE-OFF MINIMUMS: **Rwys 10, 16, 300-1.**

## CLARE, MI

CLARE MUNI (48D)

TAKE-OFF MINIMUMS: **Rwys 8, 13, 26, 31, 300-1.**

## COLDWATER, MI

BRANCH COUNTY MEMORIAL (OEB)

AMDT 4 08101 (FAA)

TAKE-OFF MINIMUMS: **Rwys 16, 34, NA - Environmental.**

NOTE: **Rwy 4**, vehicles on road and trees beginning 5' from departure end of runway, 92' right of centerline, up to 100' AGL/1059' MSL. Vehicles on road and trees beginning 347' from departure end of runway, 317' left of centerline, up to 100' AGL/1,059' MSL. **Rwy 7**, trees beginning 1246' from departure end of runway, 430' left of centerline, up to 100' AGL/1059' MSL. Vehicles on road and trees beginning 154' from departure end of runway, 315' right of centerline, up to 100' AGL/1039' MSL. Pole 336' from departure end of runway, 274' right of centerline, 18' AGL/977' MSL. **Rwy 22**, trains on railroad and trees beginning 769' from departure end of runway, 986' left to 945' right of centerline, up to 100' AGL/1099' MSL. **Rwy 25**, vehicles on road and trees beginning 1171' from departure end of runway, 394' left of centerline, up to 100' AGL/1,059' MSL. Trees beginning 732' from departure end of runway, 95' right of centerline, up to 100' AGL/1034' MSL.

## DAVISON, MI

ATHELONE WILLIAMS MEMORIAL (6G0)

AMDT 2 97338 (FAA)

TAKE-OFF MINIMUMS: **Rwys 8, 26, 300-1.**

## DETROIT, MI

COLEMAN A. YOUNG MUNI (DET)

AMDT 6 07354 (FAA)

TAKE-OFF MINIMUMS: **Rwy 25, 300-2** or std. w/min. climb of 211' per NM to 1400, or alternatively, w/ standard takeoff minimums and a normal 200'/NM climb gradient, takeoff must occur no later than 1500' prior to departure end of runway.

DEPARTURE PROCEDURE: **Rwy 33**, climb heading 328° to 1800 before turning.

NOTE: **Rwy 7**, multiple trees beginning 232' from departure end of runway, 20' left of centerline, up to 60' AGL/687' MSL. Multiple trees beginning 283' from departure end of runway, 44' right of centerline, up to 56' AGL/680' MSL. Stack 533' from departure end of runway, 66' right of centerline, 50' AGL/671' MSL. Obstruction light on stack on building 566' from departure end of runway, 18' right of centerline, 50' AGL/671' MSL. Obstruction light on floodlight 622' from departure end of runway, 104' left of centerline, 41' AGL/668' MSL. Light standard 149' from departure end of runway, 138' left of centerline, 37' AGL/654' MSL. Light standard 227' from departure end of runway, 105' right of centerline, 33' AGL/654' MSL. Antenna on building 936' from departure end of runway, 84' right of centerline, 43' AGL/670' MSL. Obstruction light floodlight 909' from departure end of runway, 96' right of centerline, 41' AGL/668' MSL. Pole 466' from departure end of runway, 198' right of centerline, 30' AGL/654' MSL. Obstruction light on pole 132' from departure end of runway, on centerline, 16' AGL/637' MSL. **Rwy 15**, multiple trees beginning 589' from departure end of runway, 221' left of centerline, up to 69' AGL/683' MSL. Multiple trees beginning 299' from departure end of runway, 289' right of centerline, up to 52' AGL/679' MSL. Antenna on airport beacon 662' from departure end of runway, 667' left of centerline, 81' AGL/695' MSL. Pipe on obstruction light building 783' from departure end of runway, 597' left of centerline, 62' AGL/676' MSL. Obstruction light on building 1473' from departure end of runway, 556' right of centerline, 68' AGL/692' MSL. Tower 3376' from departure end of runway, 1118' right of centerline, 103' AGL/723' MSL. Antenna on building 803' from departure end of runway, 522' right of centerline, 35' AGL/656' MSL. Building 3749' from departure end of runway, 569' left of centerline, 114' AGL/723' MSL. Floodlight on building 1611' from departure end of runway, 657' left of centerline, 53' AGL/667' MSL. Rod on obstruction light building 450' from departure end of runway, 317' left of centerline, 20' AGL/637' MSL. **Rwy 25**, tower 2828' from departure end of runway, 1225' left of centerline, 141' AGL/770' MSL. Multiple trees beginning 909' from departure end of runway, 133' left of centerline, up to 76' AGL/703' MSL. Multiple trees beginning 334' from departure end of runway, 132' right of centerline, 58' AGL/685' MSL. Obstruction light on building 48' from departure end of runway, 240' left of centerline, 41' AGL/662' MSL. Railroad 1' from departure end of runway, 126' left of centerline, 29' AGL/650' MSL. Obstruction light on stack 454' from departure end of runway, 45' left of centerline, 35' AGL/659' MSL. Railroad 190' from departure end of runway, 40' left of centerline, 29' AGL/650' MSL. Obstruction light stack on building 949' from departure end of runway, 44' left of centerline, 41' AGL/668' MSL. Stack 958' from departure end of runway, 12' left of centerline, 41' AGL/668' MSL. Light standard 701' from departure end of runway, 145' right of centerline, 26' AGL/653' MSL. Stack 9474' from departure end of runway, 2415' left of centerline, 241' AGL/872' MSL.

23 SEP 2010 to 21 OCT 2010

23 SEP 2010 to 21 OCT 2010

## DETROIT, MI (CON'T)

## COLEMAN A. YOUNG MUNI (CON'T)

**Rwy 33**, multiple trees beginning 113' from departure end of runway, 118' left of centerline, up to 73' AGL/694' MSL. Multiple trees beginning 572' from departure end of runway, 84' right of centerline, up to 92' AGL/709' MSL. Flag pole 963' from departure end of runway, 379' left of centerline, 28' AGL/658' MSL.

## DETROIT METROPOLITAN/WAYNE COUNTY (DTW)

## ORIG 06159 (FAA)

**NOTE: Rwy 3R**, headwall 399' from departure end of runway, 566' right of centerline, 17' AGL/647' MSL. **Rwy 4L**, multiple transmission towers 1516' from departure end of runway, 827' left of centerline, up to 60' AGL/690' MSL, multiple antennas 2751' from departure end of runway, 762' right of centerline, up to 84' AGL/714' MSL. **Rwy 4R**, antenna on building 3348' from departure end of runway, 1301' left of centerline, 100' AGL/736' MSL. **Rwy 9L**, multiple trees 968' to 2519' from departure end of runway, 462' left of centerline and 1173' right of centerline, up to 85' AGL/715' MSL. **Rwy 9R**, tree 1837' from departure end of runway, 947' right of centerline, 50' AGL/686' MSL. **Rwy 21L**, multiple trees 1079' to 3910' from departure end of runway, 586' left of centerline and 1188' right of centerline, up to 100' AGL/733' MSL. **Rwy 22L**, multiple trees 794' to 3694' from departure end of runway, 611' right of centerline and 1381' left of centerline, up to 101' AGL/740' MSL. **Rwy 27R**, rod on ASR 4461' from departure end of runway, 464' left of centerline, 106' AGL/756' MSL.

## WILLOW RUN (YIP)

## AMDT 9 07354 (FAA)

TAKE-OFF MINIMUMS: **Rwy 27R**, 200-1½ or std. w/ min. climb of 206' per NM to 1000.

**NOTE: Rwy 5L**, multiple trees beginning 1438' to 2887' from departure end of runway, from 119' to 438' left of centerline, up to 79' AGL/785' MSL. **Rwy 5R**, multiple trees beginning 1877' to 2472' from departure end of runway, from 134' to 922' left and right of centerline, up to 78' AGL/777' MSL. **Rwy 9R**, multiple trees beginning 827' to 2598' from departure end of runway, from 432' to 600' left and right of centerline, up to 77' AGL/780' MSL. **Rwy 23L**, tree 1304' from departure end of runway, 438' right of centerline, 42' AGL/757' MSL. Tree 2457' from departure end of runway, 720' left of centerline, 66' AGL/781' MSL. **Rwy 23R**, multiple trees and road with vehicle beginning 587' to 1333' from departure end of runway, from 282' to 814' left and right of centerline, up to 77' AGL/793' MSL. **Rwy 27L**, multiple trees and poles beginning 1273' to 2024' from departure end of runway, from 47' to 769' left and right of centerline, up to 90' AGL/805' MSL. **Rwy 27R**, railroad and lights beginning 564' to 1565' from departure end of runway, from 4' to 333' left of centerline, up to 54' AGL/770' MSL. Tree and lights beginning 102' to 1257' from departure end of runway, from 10' to 485' right of centerline, up to 55' AGL/771' MSL. Tower 7161' from departure end of runway, 502' left of centerline, 162' AGL/900' MSL. **Rwy 32**, multiple trees and poles beginning 701' to 1884' from departure end of runway, from 78' to 750' left of centerline, up to 84' AGL/798' MSL. Multiple trees 1157' to 1893' from departure end of runway, from 126' to 475' right of centerline, up to 66' AGL/780' MSL.

## DETROIT/GROSSE ILE, MI

## GROSSE ILE MUNI (ONZ)

## AMDT 4 97198 (FAA)

TAKE-OFF MINIMUMS: **Rwys 4, 17, 22**, 300-1.

**Rwy 35**, 800-2 or 300-1 with a min. climb of 210' per NM to 1400.

## DOWAGIAC, MI

## DOWAGIAC MUNI (C91)

## AMDT 5 10210 (FAA)

TAKE-OFF MINIMUMS: **Rwys 4, 21**, NA-Environmental.

**NOTE: Rwy 9**, building, 258' from DER, 549' right of centerline, 26' AGL/778' MSL. Multiple poles beginning 372' from DER, 432' right of centerline, up to 42' AGL/795' MSL. Antenna, 459' from DER, 367' right of centerline, 35' AGL/787' MSL. Antenna, 615' from DER, 341' right of centerline, 35' AGL/775' MSL. Multiple poles beginning 654' from DER, 341' left of centerline, up to 48' AGL/779' MSL. Trees beginning 667' from DER, 21' left of centerline, up to 77' AGL/839' MSL. Trees beginning 864' from DER, 7' right of centerline, up to 121' AGL/879' MSL. **Rwy 27**, trees beginning 21' from DER, 33' right of centerline, up to 93' AGL/828' MSL. Trees beginning 154' from DER, 112' left of centerline, up to 111' AGL/837' MSL.

## DRUMMOND ISLAND, MI

## DRUMMOND ISLAND (DRM)

## ORIG 82301 (FAA)

TAKE-OFF MINIMUMS: **Rwys 8, 26, 18, 36**, 300-1.

## EAST TAWAS, MI

## IOSCO COUNTY (6D9)

## ORIG 81106 (FAA)

DEPARTURE PROCEDURE: **Rwys 8, 26**, climb runway heading to 1100 before turning.

## EATON RAPIDS, MI

## SKYWAY ESTATES (60G)

## ORIG 90235 (FAA)

TAKE-OFF MINIMUMS: **Rwys 8, 26**, 300-1.

DEPARTURE PROCEDURE: **Rwys 8, 26**, climb runway heading to 2500 before turning.

## ESCANABA, MI

## DELTA COUNTY (ESC)

## ORIG 09127 (FAA)

TAKE-OFF MINIMUMS: **Rwy 36**, 400-2¼ or std. w/ min. climb of 261' per NM to 1100.

**NOTE: Rwy 9**, vehicles on roadway at DER, 272' right of centerline, 15' AGL/607' MSL. Trees beginning 1013' from DER, 444' left of centerline, up to 100' AGL/690' MSL. Trees beginning 1185' from DER, 55' right of centerline, up to 100' AGL/690' MSL. **Rwy 18**, buildings 1' from DER, 480' right of centerline, up to 26' AGL/616' MSL. Fences 139' from DER, 402' right of centerline, up to 9' AGL/599' MSL. Pole 255' from DER, 563' right of centerline, 20' AGL/618' MSL. Trees beginning 329' from DER, 18' left of centerline, up to 100' AGL/664' MSL. Trees beginning 375' from DER, 19' right of centerline, up to 100' AGL/673' MSL. **Rwy 36**, tower 1.87 NM from DER, 2362' left of centerline, 293' AGL/915' MSL. Vehicles on roadway beginning 41' from DER, 40' right of centerline, 15' AGL/621' MSL. Trees beginning 349' from DER, 555' right of centerline, up to 100' AGL/697' MSL. Trees beginning 366' from DER, 2' left of centerline, up to 100' AGL/700' MSL.

**FLINT, MI**

BISHOP INTL (FNT)  
AMDT 5 02052 (FAA)

NOTE: **Rwy 18**, trees 1200' from departure end of runway,  
500' right of centerline, 65' AGL/863' MSL.

**FRANKFORT, MI**

FRANKFORT DOW MEMORIAL FIELD (FKS)  
AMDT 2 97282 (FAA)

TAKE-OFF MINIMUMS: **Rwy 15**, 500-2 or std. with a  
min. climb of 360' per NM to 1300. **Rwy 33**, 300-2.  
DEPARTURE PROCEDURE: **Rwy 33**, climb runway  
heading to 1500 before turning.

**FREMONT, MI**

FREMONT MUNI (FFX)  
ORIG 09351 (FAA)

TAKE-OFF MINIMUMS: **Rwy 27**, 300-1½ or std. w/a  
min climb of 211' per NM to 1100, or alternatively, with  
standard takeoff minimums and a normal 200' per NM  
climb gradient, take-off must occur no later than 1400'  
prior to DER.

NOTE: **Rwy 9**, trees beginning 947' from DER, on  
centerline, up to 100' AGL/866' MSL. **Rwy 18**, trees  
beginning 1055' from DER, 763' right of centerline, up to  
100' AGL/859' MSL. Pole 1140' from DER, 617' right of  
centerline, 27' AGL/784' MSL. Trees beginning 2276'  
from DER, 1029' left of centerline, up to 100' AGL/847'  
MSL. **Rwy 27**, trees beginning 816' from DER, 635'  
right of centerline, up to 100' AGL/876' MSL. Trees  
beginning 2640' from DER on centerline, up to 100'  
AGL/876' MSL. Trees beginning 1.18 NM from DER,  
1830' right of centerline, up to 100' AGL/960' MSL.  
**Rwy 36**, terrain 81' from DER, 484' left of centerline,  
774' MSL. Transmission poles beginning 1157' from  
DER, 728' left to 497' right of centerline, up to 40' AGL/  
817' MSL. Catenary 1564' from DER, 41' right of  
centerline, 37' AGL/814' MSL. Trees beginning 1584'  
from DER, 577' left to 412' right of centerline, up to 67'  
AGL/844' MSL.

**GAYLORD, MI**

GAYLORD RGNL (GLR)  
ORIG 09127 (FAA)

NOTE: **Rwy 9**, trees beginning 917' from DER, 318' right  
of centerline, up to 57' AGL/1387' MSL. Trees beginning  
918' from DER, 357' left of centerline, up to 79' AGL/  
1407' MSL. Ceilometer 166' from DER, 258' left of  
centerline, 4' AGL/1334' MSL. **Rwy 18**, powerline pylon  
2125' from DER, 917' right of centerline, 79' AGL/1398'  
MSL. Bushes beginning 18' from DER, 255' left of  
centerline, up to 21' AGL/1338' MSL. **Rwy 27**, trees  
beginning 2870' from DER, 345' right of centerline, up  
to 83' AGL/1403' MSL. Tree 2906' from DER, 234' left of  
centerline, 75' AGL/1395' MSL. **Rwy 36**, trees and bush  
beginning 79' from DER, 191' left of centerline, up to 54'  
AGL/1374' MSL.

**GLADWIN, MI**

CHARLES ZETTEL MEMORIAL (GDW)  
AMDT 2 97086 (FAA)  
TAKE-OFF MINIMUMS: **Rwy 27**, 600-2.  
**Rwy 33**, 500-2.

**GRAND HAVEN, MI**

GRAND HAVEN MEMORIAL AIRPARK (3GM)  
AMDT 4 83272 (FAA)

TAKE-OFF MINIMUMS: **Rwys 18, 36**, 300-1.  
DEPARTURE PROCEDURE: **Rwys 9, 18, 27, 36**, climb  
runway heading to 1100 before turning.

**GRAND LEDGE, MI**

ABRAMS MUNI (4D0)  
AMDT 2 93147 (FAA)

TAKE-OFF MINIMUMS: **Rwys 18, 27, 36**, 300-1 or std.  
with a min. climb of 300' per NM to 1200.

**GRAND RAPIDS, MI**

GERALD R. FORD INTL (GRR)  
AMDT 2 09183 (FAA)

NOTE: **Rwy 8L**, vehicle on road 20' from DER, 156' left of  
centerline, 15' AGL/794' MSL. Trees beginning 1419'  
from DER, 740' left of centerline, up to 100' AGL/859'  
MSL. **Rwy 17**, trees beginning 1382' from DER, 134'  
left of centerline, up to 100' AGL/929' MSL. Trees  
beginning 1389' from DER, 819' right of centerline, up  
to 100' AGL/899' MSL. **Rwy 26R**, terrain beginning 102'  
from DER, 381' right of centerline, up to 808' MSL.  
**Rwy 35**, vehicle on road 742' from DER, 675' left of  
centerline, up to 15' AGL/804' MSL. Trees beginning  
2002' from DER, 715' left of centerline, up to 100' AGL/  
869' MSL. Trees beginning 1339' from DER, 7' right of  
centerline, up to 100' AGL/879' MSL.

**GRAYLING, MI**

GRAYLING AAF (GOV)  
AMDT 3 10154 (FAA)

NOTE: **Rwy 5**, tree 1192' from DER, 275' right of  
centerline, 56' AGL/1215' MSL. Tree 1684' from DER,  
600' left of centerline, 56' AGL/1225' MSL. **Rwy 14**, tree  
435' from DER, 402' right of centerline, 57' AGL/1216'  
MSL. Antenna 3937' from DER, 1179' right of centerline,  
136' AGL/1279' MSL. **Rwy 23**, trees beginning 1438'  
from DER, 29' right of centerline, up to 100' AGL/1269'  
MSL. **Rwy 32**, trees beginning 1611' from DER, 50' left  
of centerline, up to 66' AGL/1216' MSL.

**GREENVILLE, MI**

GREENVILLE MUNI (6D6)  
AMDT 2 02164 (FAA)

TAKE-OFF MINIMUMS: **Rwy 19**, 300-1.

**HANCOCK, MI**

HOUGHTON COUNTY MEMORIAL (CMX)  
AMDT 2 89208 (FAA)

TAKE-OFF MINIMUMS: **Rwy 25**, 300-1.  
DEPARTURE PROCEDURE: **Rwys 25, 31**, climb runway  
heading to 1500 before turning.



## HARBOR SPRINGS, MI

HARBOR SPRINGS (MGN)

AMDT 2 08073 (FAA)

TAKE-OFF MINIMUMS: **Rwy 28**, 300-1½ or std. w/ min. climb of 295' per NM to 2000.

DEPARTURE PROCEDURE: **Rwy 10**, Climb heading 101° to 1400 before proceeding on course. **Rwy 28**, Climb heading 281° to 2000 before turning right.

NOTE: **Rwy 10**, trees beginning abeam departure end of runway, 350' right of centerline, up to 100' AGL/788' MSL. Vehicle and road beginning 188' from departure end of runway, left to right of centerline, up to 15' AGL/736' MSL. Trees beginning 1671' from departure end of runway, 720' left of centerline, up to 100' AGL/821' MSL. **Rwy 28**, trees beginning abeam departure end of runway, 398' left of centerline, up to 100' AGL/723' MSL. Trees beginning abeam departure end of runway, 313' right of centerline, up to 100' AGL/936' MSL. Vehicle and road beginning abeam departure end of runway, left to right of centerline, up to 15' AGL/720' MSL.

## HASTINGS, MI

HASTINGS (9D9)

ADMT 4 95117 (FAA)

TAKE-OFF MINIMUMS: **Rwys 9,12,18,27**, 300-1.

## HILLSDALE, MI

HILLSDALE MUNI (JYM)

ORIG 97310 (FAA)

TAKE-OFF MINIMUMS: **Rwy 10**, 300-1.

## HOLLAND, MI

TULIP CITY (BIV)

AMDT 1 09183 (FAA)

NOTE: **Rwy 8**, vehicles on road beginning 48' from DER, 500' right of centerline, up to 15' AGL/694' MSL. Trees beginning 1828' from DER, 829' left of centerline, up to 72' AGL/741' MSL. **Rwy 26**, vehicles on road beginning 86' from DER, 517' left of centerline, up to 15' AGL/714' MSL. pole 805' from DER, 475' left of centerline, 35' AGL/734' MSL. trees 1056' from DER, 468' left of centerline, up to 41' AGL/740' MSL.

## HOUGHTON LAKE, MI

ROSCOMMON COUNTY-BLODGETT

MEMORIAL (HTL)

AMDT 1 07298 (FAA)

TAKE-OFF MINIMUMS: **Rwy 9**, 200-1¼, or std. w/ min. climb of 237' per NM to 1400. **Rwys 18,36**, NA-ATC.

DEPARTURE PROCEDURE: **Rwy 27**, climb heading 274° to 2600 before turning south.

NOTE: **Rwy 9**, multiple trees beginning 2330' from departure end of runway, on centerline, up to 71' AGL/1216' MSL. Multiple trees beginning 5927' from departure end of runway 275' left of centerline, up to 100' AGL/1299' MSL. Terrain beginning 31' from departure end of runway, 215' right of centerline, up to 0' AGL/1165' MSL. Terrain beginning 43' from departure end of runway, 84' left of centerline, up to 0' AGL/1162' MSL. **Rwy 27**, multiple trees beginning 791' from departure end of runway, on centerline, up to 90' AGL/1239' MSL. Fence and road beginning 323' from departure end of runway, on centerline, up to 15' AGL/1164' MSL. Terrain beginning 100' from departure end of runway, 171' right of centerline, up to 0' AGL/1165' MSL. Terrain beginning 112' from departure end of runway, 128' left of centerline, up to 0' AGL/1162' MSL.

## HOWELL, MI

LIVINGSTON COUNTY SPENCER J. HARDY

(OZW)

AMDT 33 06215 (FAA)

NOTE: **Rwy 31**, multiple trees and light pole beginning 138' from departure end of runway, 334' right of centerline, up to 88' AGL/1030' MSL. Multiple trees beginning 914' from departure end of runway, 483' left of centerline, up to 83' AGL/1012' MSL. **Rwy 13**, tree 1776' from departure end of runway, 696' right of centerline, 70' AGL/1009' MSL.

## IONIA, MI

IONIA COUNTY (Y70)

ORIG 83230 (FAA)

DEPARTURE PROCEDURE: **Rwys 9,18,27,36**, climb runway heading to 1400 before turning.

## IRON MOUNTAIN-KINGSFORD, MI

FORD (IMT)

AMDT 5 09071 (FAA)

TAKE-OFF MINIMUMS: **Rwy 13**, 300-1 or std. w/ min. climb of 590' per NM to 1400. **Rwy 31**, 300-1¼ or std. w/ min. climb of 260' per NM to 1400.

DEPARTURE PROCEDURE: **Rwy 1**, climb heading 010° to 1700 before turning right. **Rwy 13**, climb heading 134° to 1900 before turning left.

NOTE: **Rwy 1**, trees and bushes beginning 526' from DER, 292' right of centerline, up to 79' AGL/1259' MSL. Antenna, trees and bushes beginning 378' from DER, 192' left of centerline, up to 76' AGL/1276' MSL. **Rwy 13**, tree 1276' from DER, 312' right of centerline, 88' AGL/1188' MSL. Trees and poles beginning 547' from DER, 100' left of centerline, up to 86' AGL/1306' MSL. **Rwy 19**, trees beginning 992' from DER, 245' right of centerline, up to 56' AGL/1192' MSL. Trees beginning 1229' from DER, 376' left of centerline, up to 48' AGL/1183' MSL. **Rwy 31**, trees 1711' from DER, 113' right of centerline, 66' AGL/1186' MSL. Bush 165' from DER, 161' right of centerline, 11' AGL/1131' MSL. Trees beginning 66' from DER, 182' left of centerline, up to 95' AGL/1315' MSL.

## IRONWOOD, MI

GOGEBIC-IRON COUNTY (IWD)

AMDT 6 09127 (FAA)

DEPARTURE PROCEDURE: **Rwy 9**, climb heading 090° to 2300 before turning right. **Rwy 27**, climb heading 270° to 1700 before turning left.

NOTE: **Rwy 9**, trees beginning 61' from DER, 544' left of centerline, up to 31' AGL/1244' MSL. Tree 1853' from DER, 972' left of centerline, 100' AGL/1346' MSL. **Rwy 27**, vehicle on road 287' from DER, 2' right of centerline, 15' AGL/1237' MSL. Tree 1946' from DER, 952' right of centerline, 69' AGL/1283' MSL. Tree 2817' from DER, 588' left of centerline, 74' AGL/1304' MSL.

**JACKSON, MI**

JACKSON COUNTY-REYNOLDS FIELD (JXN)  
AMDT 5 09295 (FAA)

NOTE: **Rwy 6**, antenna 3131' from DER, 1331' left of centerline, 75' AGL/1075' MSL. **Rwy 14**, tank 2617' from DER, 373' left of centerline, 107' AGL/1107' MSL. Antenna 3102' from DER, 597' left of centerline, 111' AGL/1111' MSL. Trees beginning 1137' from DER, 8' left of centerline, up to 84' AGL/1083' MSL. Trees and poles beginning 518' from DER, 13' right of centerline, up to 114' AGL/1113' MSL. Road plus vehicle 541' from DER, 245' right of centerline, 15' AGL/1015' MSL. **Rwy 24**, trees and poles beginning 367' from DER, 48' left of centerline, up to 80' AGL/1079' MSL. Buildings beginning 125' from DER, 372' left of centerline, 23' AGL/1022' MSL. Fence beginning 88' from DER, 247' right of centerline, 10' AGL/1002' MSL. Road plus vehicle 306' from DER, 3' right of centerline, 15' AGL/1007' MSL. Trees beginning 1231' from DER, 232' right of centerline, up to 62' AGL/1051' MSL. Localizer obstruction light 140' from DER, on centerline, 10' AGL/999' MSL. **Rwy 32**, trees and poles beginning 169' from DER, 69' left of centerline, up to 104' AGL/1093' MSL. Fence beginning 475' from DER, 148' left of centerline, up to 10' AGL/985' MSL. Trees beginning 94' from DER, 5' right of centerline, up to 103' AGL/1092' MSL. Fence beginning 278' from DER, 367' right of centerline, up to 10' AGL/999' MSL.

**KALAMAZOO, MI**

KALAMAZOO/BATTLE CREEK INTL (AZO)  
AMDT 9 07242 (FAA)

NOTE: **Rwy 5**, light pole 906' from departure end of runway, 511' left of centerline, 25' AGL/879' MSL. Multiple trees beginning 1433' from departure end of runway, 90' left of centerline, up to 65' AGL/914' MSL. Multiple towers beginning 2399' from departure end of runway, 331' right of centerline, up to 119' AGL/970' MSL. Multiple trees beginning 156' from departure end of runway, 163' right of centerline, up to 78' AGL/917' MSL. **Rwy 9**, multiple trees beginning 588' from departure end of runway, on centerline, up to 104' AGL/958' MSL. Antenna 2187' from departure end of runway, 222' right of centerline, 69' AGL/928' MSL. Tree 677' from departure end of runway, 214' right of centerline, 45' AGL/899' MSL. **Rwy 17**, railroad 587' from departure end of runway, 613' left of centerline, 17' AGL/885' MSL. Tree 691' from departure end of runway, 583' right of centerline, 57' AGL/894' MSL. **Rwy 23**, multiple trees beginning 937' from departure end of runway, 50' left of centerline, up to 72' AGL/956' MSL. Multiple poles and hangar beginning 22' from departure end of runway, 331' right of centerline, up to 24' AGL/905' MSL. Multiple trees beginning 943' from departure end of runway, 144' right of centerline, up to 107' AGL/986' MSL. **Rwy 27**, road 543' from departure end of runway, on centerline, 15' AGL/890' MSL. Multiple trees beginning 414' from departure end of runway, 292' left of centerline, up to 23' AGL/972' MSL. Multiple light poles and towers beginning 521' from departure end of runway, 18' right of centerline, up to 180' AGL/1015' MSL. Multiple trees beginning 1012' from departure end of runway, 23' right of centerline, up to 75' AGL/969' MSL. **Rwy 35**, multiple trees beginning 2319' from departure end of runway, 163' left of centerline, up to 75' AGL/934' MSL. Multiple trees beginning 1961' from departure end of runway, 753' right of centerline, up to 77' AGL/936' MSL.

**LAKEVIEW, MI**

LAKEVIEW AIRPORT-GRIFFITH FIELD (13C)  
ORIG 98281 (FAA)

TAKE-OFF MINIMUMS: **Rwy 27**, 300-1 or std. with a min. climb of 400' per NM to 1200.

NOTE: **Rwy 9**, 1018' tree 50' from departure end of runway, 490' right of centerline.

**LAMBERTVILLE, MI**

TOLEDO SUBURBAN (DUH)  
AMDT 1 80360 (FAA)

TAKE-OFF MINIMUMS: **Rwys 9, 27**, 300-1.

**LANSING, MI**

CAPITAL REGION INTL (LAN)  
AMDT 13 93147 (FAA)

TAKE-OFF MINIMUMS: **Rwys 6, 10L, 24, 28R**, 300-1.

DEPARTURE PROCEDURE: **Rwys 10L, 10R**, climb runway heading to 2000 before turning south.

**Rwys 6, 24, 28L, 28R**, climb runway heading to 1500 before turning southeast.

**LAPEER, MI**

DUPONT-LAPEER (D95)  
AMDT 3 86156 (FAA)

TAKE-OFF MINIMUMS: **Rwys 9, 27**, 300-1.

**LINDEN, MI**

PRICE'S (9G2)  
AMDT 4 98085 (FAA)  
TAKE-OFF MINIMUMS: **Rwy 36**, NA.

**LUDINGTON, MI**

MASON COUNTY (LDM)  
AMDT 6 92233 (FAA)  
TAKE-OFF MINIMUMS: **Rwys 1, 19, 26**, 300-1.

**MACKINAC ISLAND, MI**

MACKINAC ISLAND (MCD)  
AMDT 1 80164 (FAA)  
DEPARTURE PROCEDURE: **Rwy 8**, climb runway heading to 1100 before turning right.

**MARQUETTE, MI**

SAWYER INTL (SAW)  
ORIG 10098 (FAA)  
NOTE: **Rwy 19**, trees beginning 2582' from DER, left and right of centerline, up to 100' AGL/1269' MSL.

**MASON, MI**

MASON JEWETT FIELD (TEW)  
AMDT 2A 10154 (FAA)  
NOTE: **Rwy 10**, trees, pole, and vehicle on road beginning 109' from DER, 57' right of centerline, up to 100' AGL/1023' MSL. Poles and vehicles on road 276' from DER, 245' left of centerline, up to 35' AGL/944' MSL.

**MENOMINEE, MI**

MENOMINEE-MARINETTE TWIN COUNTY  
(MNM)

AMDT 3 09239 (FAA)

NOTE: **Rwy 3**, trees and bush beginning 196' from DER, 340' left of centerline, up to 100' AGL/719' MSL.

Multiple trees beginning 1568' from DER, 702' right of centerline, up to 100' AGL/759' MSL. **Rwy 14**, multiple trees, poles, and building beginning 451' from DER, 85' left of centerline, up to 135' AGL/735' MSL. Multiple trees and pole beginning 651' from DER, 171' right of centerline, up to 100' AGL/704' MSL. **Rwy 21**, multiple trees beginning 932' from DER, 469' left of centerline, up to 77' AGL/677' MSL. Multiple trees beginning 1808' from DER, 701' right of centerline, up to 65' AGL/685' MSL. **Rwy 32**, multiple trees beginning 64' from DER, 71' left of centerline, up to 100' AGL/739' MSL. Multiple trees beginning 875' from DER, 15' right of centerline, up to 100' AGL/759' MSL.

**MILAND, MI**

JACK BARSTOW (IKW)

ORIG 09183 (FAA)

NOTE: **Rwy 6**, trees beginning 56' from DER, 493' right of centerline, up to 25' AGL/655' MSL. Trees beginning 920' from DER, 47' left of centerline, up to 20' AGL/660' MSL. Trees beginning 1144' from DER, from right to left of centerline, up to 100' AGL/754' MSL. Pole 1495' from DER, 331' right of centerline, 37' AGL/672' MSL.

**Rwy 18**, trees beginning 339' from DER, 279' left of centerline, up to 100' AGL/729' MSL. Trees beginning 358' from DER, 306' right of centerline, up to 100' AGL/724' MSL. **Rwy 24**, vehicles on road beginning 225' from DER, from right to left of centerline, up to 15' AGL/634' MSL. Trees beginning 510' from DER, 103' right of centerline, up to 100' AGL/710' MSL. Trees beginning 787' from DER, 152' left of centerline, up to 100' AGL/709' MSL. **Rwy 36**, trees beginning 105' from DER, 200' right of centerline, up to 100' AGL/744' MSL. Trees beginning 147' from DER, 242' left of centerline, up to 100' AGL/729' MSL.

**MIRONO, MI**

CUSTER (TTF)

AMDT 6 08213

NOTE: **Rwy 21**, Trees and light poles beginning 81' from departure end of runway, 9' right of centerline, up to 122' AGL/736' MSL. Trees and light poles beginning 243' from departure end of runway, 218' left of centerline, up to 98' AGL/707' MSL. Road and vehicle beginning 1954' from departure end of runway, on centerline, 15' AGL/626' MSL.

**MOUNT PLEASANT, MI**

MOUNT PLEASANT MUNI (MOP)

AMDT 5 09239 (FAA)

TAKE-OFF MINIMUMS: **Rwys 5, 23**, NA-Environmental.

NOTE: **Rwy 9**, trees beginning 420' from DER, 512' right of centerline, up to 86' AGL/845' MSL. Trees beginning 420' from DER, 266' left of centerline, up to 23' AGL/836' MSL. **Rwy 27**, trees beginning 1115' from DER, 39' right of centerline, up to 99' AGL/858' MSL. Trees beginning 1025' from DER, 3' left of centerline, up to 108' AGL/867' MSL.

**MUSKEGON, MI**

MUSKEGON COUNTY (MKG)

AMDT 10 09015 (FAA)

NOTE: **Rwy 6**, tree 1700' from departure end of runway, 600' right of centerline, 25' AGL/672' MSL. Multiple trees beginning 1980' from departure end of runway, 300' left of centerline, up to 75' AGL/709' MSL. **Rwy 14**, pole 1040' from departure end of runway, 700' left of centerline, 25' AGL/655' MSL. Multiple poles beginning 1500' from departure end of runway, 880' right of centerline, up to 50' AGL/677' MSL. Tree 1900' from departure end of runway, 940' left of centerline, 79' AGL/709' MSL. **Rwy 24**, bush 124' from departure end of runway, 480' left of centerline, 19' AGL/630' MSL. Tree 500' from departure end of runway, 300' right of centerline, 42' AGL/649' MSL. Tree 1210' from departure end of runway, 450' left of centerline, 42' AGL/653' MSL. Antenna 1220' from departure end of runway, 500' right of centerline, 43' AGL/654' MSL. Multiple trees beginning 2200' from departure end of runway, 50' left of centerline, up to 86' AGL/697' MSL. **Rwy 32**, tree 1040' from departure end of runway, 740' right of centerline, 65' AGL/659' MSL. Tree 1190' from departure end of runway, 500' left of centerline, 65' AGL/663' MSL. Tree 1270' from departure end of runway, 800' left of centerline, 89' AGL/690' MSL.

**NEW HUDSON, MI**

OAKLAND SOUTHWEST (Y47)

AMDT 2 88350 (FAA)

TAKE-OFF MINIMUMS: **Rwys 7, 25**, 300-1.

**NEWBERRY, MI**

LUCE COUNTY (ERY)

ORIG 10210 (FAA)

TAKE-OFF MINIMUMS: **Rwys 4, 22**, NA-Environmental.

NOTE: **Rwy 11**, trees beginning 15' from DER, 112' right of centerline, up to 79' AGL/919' MSL. Trees beginning 1207' from DER, 10' left of centerline, up to 119' AGL, 969' MSL. **Rwy 29**, ground 1' from DER, 221' right of centerline, 0' AGL/872' MSL. Tree 1' from DER, 431' right of centerline, 12' AGL/872' MSL. Trees and antenna on building beginning 88' from DER, 13' left of centerline, up to 84' AGL/954' MSL. Trees, vehicle on road, and antenna on building beginning 561' from DER, 28' right of centerline, up to 89' AGL/959' MSL.

**NILES, MI**

JERRY TYLER MEMORIAL (3TR)

AMDT 5 10042 (FAA)

TAKE-OFF MINIMUMS: **Rwys 4, 14, 22, 32**, 300-1.

DEPARTURE PROCEDURE: **Rwys 4, 14**, climb runway heading to 1400 before turning. **Rwy 22**, left turn climb heading 180° to 1400 before turning. **Rwy 32**, right turn climb heading 360° to 1400 before turning.

**ONTONAGON, MI**

ONTONAGON COUNTY-SCHUSTER FIELD  
(OGM)

AMDT 1 86072 (FAA)

TAKE-OFF MINIMUMS: **Rwys 17, 35**, 300-1.



**OSCODA, MI**

OSCODA-WURTHSMITH (OSC)

ORIG 08157 (FAA)

NOTE: **Rwy 6**, Trees beginning 3096' from departure end of runway, 967' left of centerline up to 100' AGL/719' MSL. **Rwy 24**, Trees beginning 2192' from departure end of runway, 578' right of centerline up to 100' AGL/739' MSL. Trees beginning 1415' from departure end of runway, 559' left of centerline, up to 100' AGL/739' MSL.

**OWOSSO, MI**

OWOSSO COMMUNITY (RNP)

AMDT 4 08213 (FAA)

TAKE-OFF MINIMUMS: **Rwys 6, 18, 24, 36**, NA - Environmental.

NOTE: **Rwy 10**, bush 187' from departure end of runway, 158' right of centerline, 3' AGL/742' MSL. Trees beginning 1136' from departure end of runway, 630' left of centerline, up to 75' AGL/814' MSL. Trees and pole beginning 1111' from departure end of runway, 596' right of centerline, up to 90' AGL/829' MSL. Powerline with towers beginning 2029' from departure end of runway, left and right of centerline, 90' AGL/829' MSL. **Rwy 28**, bush 212' from departure end of runway, 436' right of centerline, 11' AGL/741' MSL. Vent, trees, and a building beginning 266' from departure end of runway, 46' left of centerline, up to 100' AGL/836' MSL. Trees and a pole beginning 1184' from departure end of runway, 244' right of centerline, up to 60' AGL/815' MSL.

**PELLSTON, MI**

PELLSTON RGNL AIRPORT OF EMMET COUNTY (PLN)

AMDT 4 09183 (FAA)

TAKE-OFF MINIMUMS: **Rwy 23**, std. w/ a min. climb of 260' per NM to 1800, or 1000-2% for climb in visual conditions. **Rwy 32**, std. w/ a min. climb of 290' per NM to 1100, or 1000-2% for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 23, 32**, for climb in visual conditions: cross Pellston Rgnl airport of Emmet County at or above 1600.

NOTE: **Rwy 5**, vehicle on road 411' from DER, 588' left of centerline, 15' AGL/738' MSL. Trees beginning 1070' from DER, 12' left of centerline, up to 100' AGL/838' MSL. Railroad 810' from DER, 672' right of centerline, 23' AGL/744' MSL. Trees beginning 1001' from DER, 288' right of centerline, up to 100' AGL/821' MSL.

**Rwy 14**, trees beginning 1290' from DER, 814' left of centerline, up to 100' AGL/805' MSL. **Rwy 23**, vehicle on road 14' from DER, 463' left of centerline, 15' AGL/720' MSL. Trees beginning 476' from DER, 53' left of centerline, up to 100' AGL/805' MSL. Trees beginning 953' from DER, 240' right of centerline, up to 100' AGL/820' MSL. Tree 2.97 NM from DER, 2771' right of centerline, 100' AGL/1297' MSL. **Rwy 32**, bush 107' from DER, 309' right of centerline, 4' AGL/722' MSL. Vehicle on road 1213' from DER, 809' right of centerline, 15' AGL/752' MSL. Terrain 2127' from DER, 715' right of centerline, 775' MSL. Trees beginning 4336' from DER, 315' right of centerline, up to 100' AGL/872' MSL. Trees beginning 1932' from DER, 20' left of centerline, up to 100' AGL/996' MSL.

**PLYMOUTH, MI**

CANTON-PLYMOUTH-METTETAL (1D2)

TAKE-OFF MINIMUMS: **Rwys 18, 36**, 300-1.**PONTIAC, MI**

OAKLAND COUNTY INTL (PTK)

AMDT 5 09295 (FAA)

TAKE-OFF MINIMUMS: **Rwys 17, 35**, NA-Environmental. NOTE: **Rwy 9L**, hangars beginning 203' from DER, 511' left of centerline, up to 30' AGL/1000' MSL. **Rwy 9R**, multiple trees beginning 1382' from DER, 647' left of centerline, up to 41' AGL/1011' MSL. Antenna on hangar 870' from DER, 732' right of centerline, 36' AGL/1006' MSL. **Rwy 27L**, trees 452' from DER, 331' right of centerline, 23' AGL/1002' MSL. Vehicle on road 388' from DER, 15' right of centerline, 15' AGL/992' MSL. Multiple trees beginning 449' from DER, 60' left of centerline, up to 76' AGL/1046' MSL. **Rwy 27R**, multiple trees beginning 451' from DER, 2' right of centerline, up to 62' AGL/1041' MSL. Vehicle on road 416' from DER, 24' right of centerline, 15' AGL/992' MSL. Multiple trees beginning 387' from DER, 19' left of centerline, up to 36' AGL/1015' MSL.

**PORT HURON, MI**

ST. CLAIR COUNTY INTL (PHN)

AMDT 5 96060 (FAA)

TAKE-OFF MINIMUMS: **Rwys 4, 10, 28**, 300-1.**ROGERS CITY, MI**

PRESQUE ISLE COUNTY (PZQ)

AMDT 1 86268 (FAA)

TAKE-OFF MINIMUMS: **Rwys 9, 27**, 300-1.**ROMEO, MI**

ROMEO STATE (D98)

AMDT 4 08101 (FAA)

NOTE: **Rwy 18**, Vehicle on roadway 364' from departure end of runway, on centerline, 15' AGL/744' MSL. Trees beginning 1360' from departure end of runway, 854' left of centerline, up to 100' AGL/825' MSL. **Rwy 36**, Vehicle on roadway 579' from departure end of runway, on centerline, 15' AGL/759' MSL. Trees beginning 955' from departure end of runway, left and right of centerline, up to 100' AGL/845' MSL.

**SAGINAW, MI**

MBS INTL (MBS)

ORIG 86240 (FAA)

DEPARTURE PROCEDURE: **Rwys 5, 23**, climb runway heading to 1100 before turning.

SAGINAW COUNTY H.W. BROWNE (HYX)

AMDT 7 86128 (FAA)

TAKE-OFF MINIMUMS: **Rwys 5, 9, 23, 27**, 400-1. DEPARTURE PROCEDURE: **Rwy 9**, climb runway heading to 2100 before turning North. **Rwys 23, 27**, climb runway heading to 2100 before turning Northeast. **Rwy 5**, right turn climb heading 090° to 2100 before turning North.

**SAULT STE MARIE, MI**

CHIPPEWA COUNTY INTL (CIU)

ORIG 09295 (FAA)

NOTE: **Rwy 9**, buildings beginning 453' from DER, 519' right of centerline, up to 30' AGL/829' MSL. Building 723' from DER, 461' left of centerline, up to 30' AGL/829' MSL. Trees beginning 1838' from DER, 23' right of centerline, up to 100' AGL/899' MSL.

**Rwy 16**, trees beginning 3645' from DER, extending from 1018' right of centerline to 1221' left of centerline, up to 100' AGL/899' MSL. **Rwy 27**, vehicle on road, 412' from DER, 510' left of centerline, up to 15' AGL/804' MSL. Trees beginning 520' from DER, extending from 581' left of centerline to 827' right of centerline, up to 100' AGL/879' MSL.

**SELFRIDGE ANGB (KMTC)**

MT. CLEMENS, MI . . . . .AMDT 1, 09015

**Rwy 19\*****Rwy 1, 300-1½\*\***

\* Standard with a CG of 260'/NM to 1600.

\*\* Or standard with CG of 280'/NM to 1000.

DEPARTURE PROCEDURE: **Rwy 19**, For climb in visual conditions: Ceiling 1300'/Visibility 2½ SM, remain within 5.6 NM of KMTC airport, cross KMTC airport at or above 1700 before proceeding on course. Max airspeed 250 KIAS.

**Rwy 1**, Standard with minimum climb of 280'/NM to 1000 or 300-1½.

TAKE-OFF OBSTACLES: **Rwy 19**: Power poles 2274' from DER 38' right of centerline, 36' AGL/616' MSL. Trees 3310' from DER 929' right of centerline, 80' AGL/660' MSL. **Rwy 1**: Rising terrain 6' out to 237' from DER beginning 500' out to 563' left of centerline, up to 585' MSL (up to 6' above Thr). Fence from 68' out to 220' from DER beginning 341' to 523' right of centerline, 10' AGL/595' MSL. Trees starting 3043' out to 3099' from DER beginning 451' to 927' right of centerline, 80' AGL/660' MSL. Trees starting 2334' out to 3059' from DER beginning 1057' to 1105' left of centerline, 80' AGL/660' MSL. Vehicle 1560' from DER 427' left of centerline, 15' AGL/600' MSL. West bracket reflector 997' from DER 226' left of centerline, 15' AGL/592' MSL.

**SOUTH HAVEN, MI**

SOUTH HAVEN AREA RGNL (LWA)

AMDT 2 91234 (FAA)

TAKE-OFF MINIMUMS: **Rwys 4, 14, 32**, 300-1.**SPARTA, MI**

PAUL C. MILLER-SPARTA (8D4)

AMDT 2 10126 (FAA)

NOTE: **Rwy 7**, multiple trees beginning 564' from DER, 105' right of centerline, up to 97' AGL/827' MSL. Tree 782' from DER, 379' left of centerline, 47' AGL/784' MSL.

**Rwy 25**, multiple trees beginning 507' from DER, 47' right of centerline, up to 81' AGL/841' MSL. Tree 117' from DER, 218' left of centerline, 47' AGL/817' MSL. Tree 656' from DER, 464' left of centerline, 67' AGL/822' MSL.

**STURGIS, MI**

KIRSCH MUNI (IRS)

AMDT 2 96256 (FAA)

TAKE-OFF MINIMUMS: **Rwy 6, 24**, 300-1.**TECUMSEH, MI**

MEYERS-DIVER'S (3TE)

AMDT 2 96004 (FAA)

TAKE-OFF MINIMUMS: **Rwy 9**, 300-1.**TRAVERSE CITY, MI**

CHERRY CAPITAL (TVC)

AMDT 9 98169 (FAA)

TAKE-OFF MINIMUMS: **Rwys 18, 36**, 300-1.

**Rwy 28**, 700-2 or std. with min. climb of 300' per NM to 2000.

DEPARTURE PROCEDURE: **Rwys 10, 18, 36**, climb runway heading to 2000 before proceeding on course.

**Rwy 28**, climbing left turn heading 240° to 2000 before proceeding on course.

**TROY, MI**

OAKLAND/TROY (VLL)

AMDT 3 92289 (FAA)

TAKE-OFF MINIMUMS: **Rwy 27**, 300-1.

DEPARTURE PROCEDURE: **Rwys 9, 27**, climb runway heading to 1200 before turning.

**WEST BRANCH, MI**

WEST BRANCH COMMUNITY (Y31)

AMDT 2 97086 (FAA)

TAKE-OFF MINIMUMS: **Rwy 27**, 500-2.

**ABRAMS MUNI** (See GRAND LEDGE)

**ADRIAN** N41°52.20' W84°04.65' NOTAM FILE ADG.  
NDB (MHW) 278 ADG at Lenawee Co. Unmonitored.

**DETROIT**  
L-28J

**ADRIAN**

**LENAAWEE CO** (ADG) 3 SW UTC-5(-4DT) N41°52.06' W84°04.64'

798 B S4 FUEL 100LL, JET A NOTAM FILE ADG

RWY 05-23: H5001X100 (ASPH) S-20 HIRL

RWY 05: REIL. PAPI(P4L)—GA 3.0° TCH 32'. P-line.

RWY 23: PAPI(P4L)—GA 3.0° TCH 32'. Trees.

RWY 11-29: 1810X150 (TURF)

RWY 11: Trees. RWY 29: Trees.

**AIRPORT REMARKS:** Attended 1300Z±—dusk. Arpt unattended major holidays except by prior arrangement; call arpt manager 517-265-2827, arpt manager nghts 517-442-8934. 24 hr self serve fuel (100LL only) with credit card. Rwy 11-29 CLOSED Dec-Apr and when snow covered. Snow removal Rwy 05-23 only. Taxi on hard surfaces only during spring thaw and wet conditions. Rwy 11-29 marked with 3' yellow cones. HIRL Rwy 05-23 preset low ints; to increase ints and ACTIVATE PAPI Rwy 05 and Rwy 23—CTAF. Ldg fee for commercial acft waived with fuel purchase.

**WEATHER DATA SOURCES:** ASOS 118.375 (517) 265-9089.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

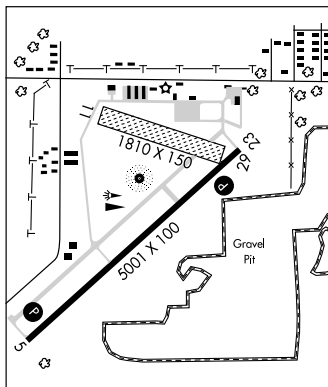
® TOLEDO APP/DEP CON 134.35

**RADIO AIDS TO NAVIGATION:** NOTAM FILE JXN.

JACKSON (L) VOR/DME 109.6 JXN Chan 33 N42°15.55'

W84°27.51' 149° 29 NM to fld. 995/5W.

ADRIAN NDB (MHW) 278 ADG N41°52.20' W84°04.65' at fld. NOTAM FILE ADG. Unmonitored.



**DETROIT**  
COPTER  
H-106, L-28J  
IAP

**AERONUT PARK BALLOONPORT** (See HOWELL)**ALBERT J LINDBERG** (See HESSEL)**ALLEGAN**

**PADGHAM FLD** (35D) 1 E UTC-5(-4DT) N42°31.83' W85°49.42'

706 B S4 FUEL 100LL NOTAM FILE LAN

RWY 11-29: H4300X75 (ASPH) S-18 MIRL

RWY 11: REIL. PAPI(P4L)—GA 3.0° TCH 40'. Trees.

RWY 29: REIL. PAPI(P4L)—GA 3.0° TCH 40'. Trees.

RWY 15-33: 1598X150 (TURF)

RWY 15: Trees. RWY 33: Trees.

**AIRPORT REMARKS:** Attended 1300Z±—dusk. Parachute Jumping. Rwy 15-33 surface rough. Rwy 15-33 marked with 3' yellow cones. ACTIVATE MIRL Rwy 11-29, PAPI Rwy 11 and Rwy 29, REIL Rwy 11 and Rwy 29—CTAF. Rwy 11-29 parallel twy marked with reflectors. Rwy 29 PAPI OTS infd.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

PULLMAN RCO 122.1R 112.1T (LANSING RADIO)

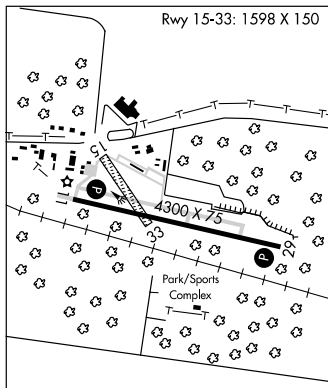
® GRAND RAPIDS APP/DEP CON 128.4 (1030-0500Z±)

® CHICAGO CENTER APP/DEP CON 128.5 (0500-1030Z±)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE LAN.

PULLMAN (H) VOR/DME 112.1 PMM Chan 58 N42°27.96'

W86°06.29' 073° 13.1 NM to fld. 640/OE.



**CHICAGO**  
L-28J  
IAP

**ALMA** N43°19.40' W84°47.18' NOTAM FILE AMN.

NDB (MHW) 329 AMN 096° 4.3 NM to Gratiot Community.

**DETROIT**  
L-28J

ADG NDB <b>278</b>	APP CRS <b>042°</b>	Rwy Idg TDZE Apt Elev	<b>5001</b> <b>798</b> <b>798</b>
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**NDB RWY 5**

ADRIAN / LENAWEE COUNTY (ADG)



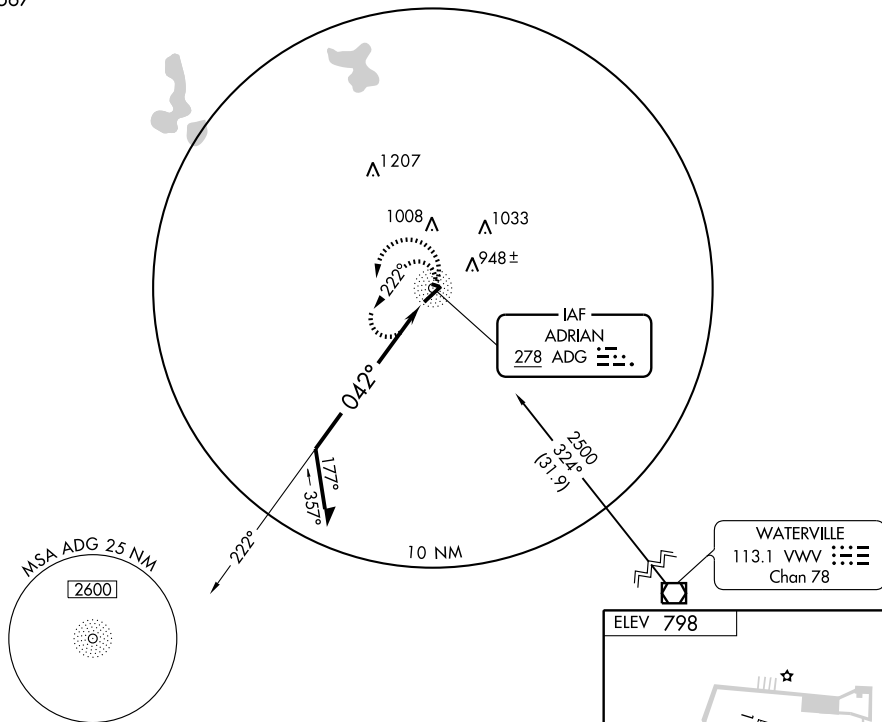
MISSED APPROACH: Climbing left turn to  
2500 in ADG NDB holding pattern.

ASOS  
**118.375**

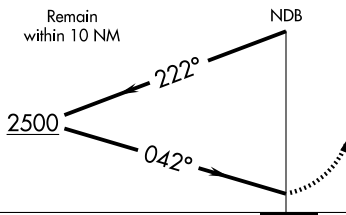
TOLEDO APP CON  
**134.35 317.55**

UNICOM  
**122.8 (CTAF) 0**

A 1567



ELEV 798



2500



278

TDZE  
798

042° to  
ADG NDB

HIRL Rwy 5-23 0

CATEGORY	A	B	C	D
S-5	1380-1	582 (600-1)	1380-1½ 582 (600-1½)	1380-1¾ 582 (600-1¾)
CIRCLING	1380-1	582 (600-1)	1380-1½ 582 (600-1½)	1380-2 582 (600-2)

Knots	60	90	120	150	180
Min:Sec					

WAAS CH <b>42603</b> <b>W05A</b>	APP CRS <b>053°</b>	Rwy Idg TDZE Apt Elev	<b>5001</b> <b>798</b> <b>798</b>
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## RNAV (GPS) RWY 5

ADRIAN / LENAWEE COUNTY (ADG)

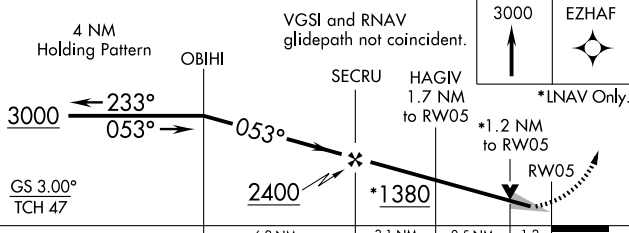
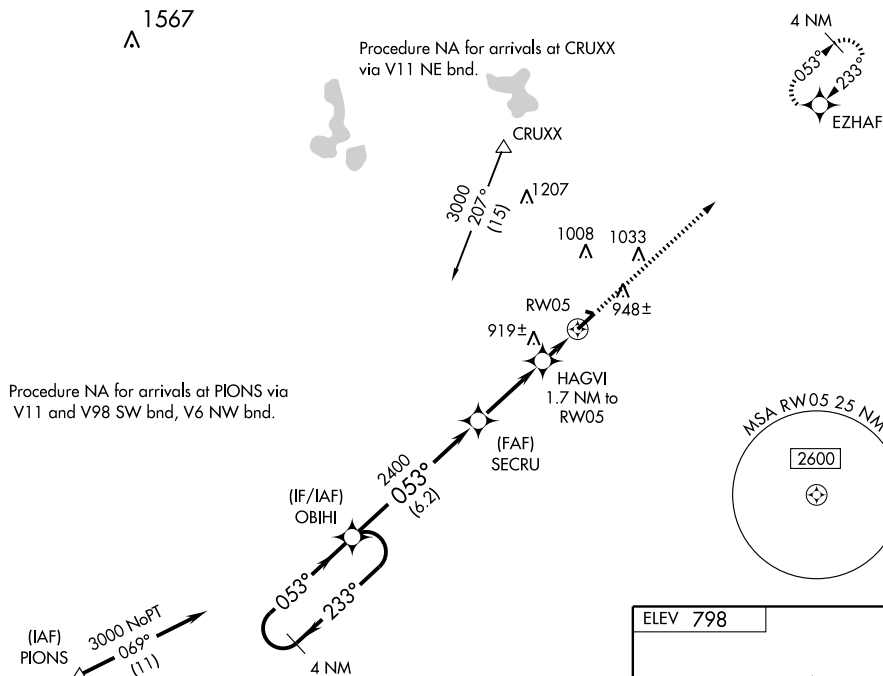
▼ For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP -0.3 NA. When local altimeter setting not received, use Ann Arbor Muni altimeter setting and increase all DAs 66 ft and all MDAs 80 ft, and increase LPV all Cats, LNAV Cat D and Circling Cat C visibility ¼ mile. Baro-VNAV and VDP NA when using Ann Arbor Muni altimeter setting.

MISSED APPROACH: Climb to 3000 direct EZHAF and hold.

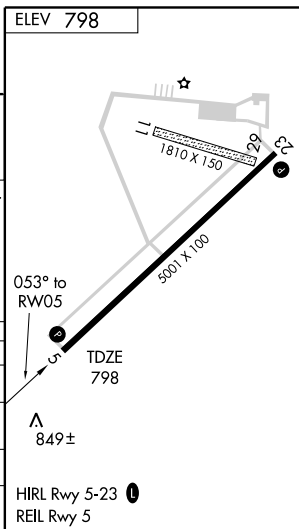
ASOS  
**118.375**

TOLEDO APP CON  
**134.35 317.55**

UNICOM  
**122.8** (CTAF) **0**



CATEGORY	A	B	C	D
LPV DA	1048-¾	250 (300-¾)		
LNAV/ DA VNAV	1119-1¼	321 (400-1¼)		
LNAV MDA	1200-1 402 (500-1)	1200-1¼ 402 (500-1¼)		
CIRCLING	1300-1 502 (600-1)	1320-1 522 (600-1)	1320-1½ 522 (600-1½)	1380-2 582 (600-2)



APP CRS <b>233°</b>	Rwy Idg TDZE Apt Elev	<b>5001</b> <b>798</b> <b>798</b>
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**RNAV (GPS) RWY 23**

ADRIAN / LENAWEE COUNTY (ADG)



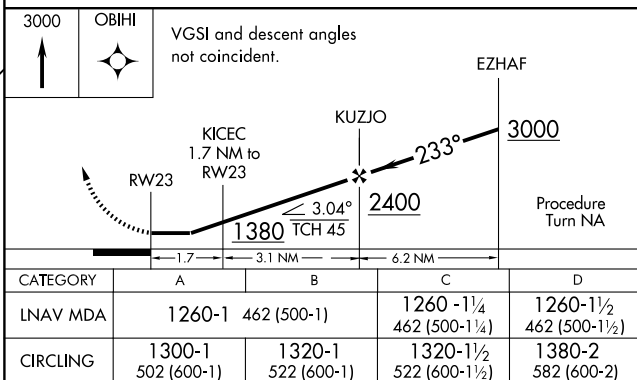
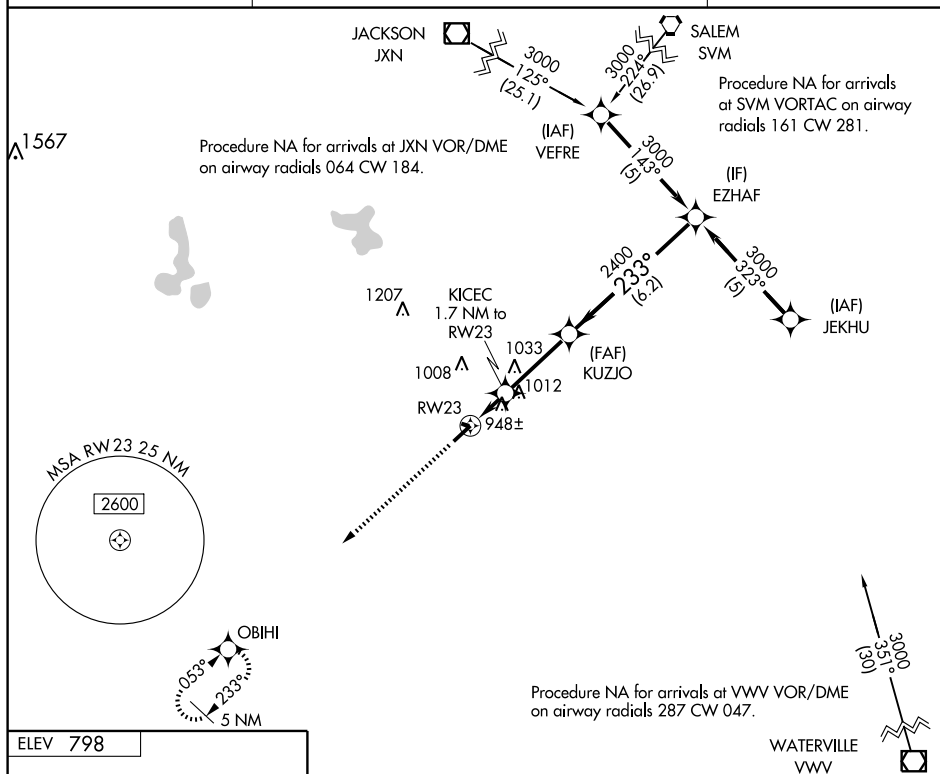
If local altimeter setting not received, use Ann Arbor Muni altimeter setting and increase all MDAs 80 feet.  
DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 3000  
direct OBIHI and hold.

ASOS  
**118.375**

TOLEDO APP CON  
**134.35 317.55**

UNICOM  
**122.8 (CTAF) 0**



**ABRAMS MUNI** (See GRAND LEDGE)

**ADRIAN** N41°52.20' W84°04.65' NOTAM FILE ADG.  
NDB (MHW) 278 ADG at Lenawee Co. Unmonitored.

**DETROIT**  
L-28J

**ADRIAN**

**LENAAWEE CO** (ADG) 3 SW UTC-5(-4DT) N41°52.06' W84°04.64'

798 B S4 FUEL 100LL, JET A NOTAM FILE ADG

RWY 05-23: H5001X100 (ASPH) S-20 HIRL

RWY 05: REIL. PAPI(P4L)—GA 3.0° TCH 32'. P-line.

RWY 23: PAPI(P4L)—GA 3.0° TCH 32'. Trees.

RWY 11-29: 1810X150 (TURF)

RWY 11: Trees. RWY 29: Trees.

**AIRPORT REMARKS:** Attended 1300Z±—dusk. Arpt unattended major holidays except by prior arrangement; call arpt manager 517-265-2827, arpt manager nghts 517-442-8934. 24 hr self serve fuel (100LL only) with credit card. Rwy 11-29 CLOSED Dec-Apr and when snow covered. Snow removal Rwy 05-23 only. Taxi on hard surfaces only during spring thaw and wet conditions. Rwy 11-29 marked with 3' yellow cones. HIRL Rwy 05-23 preset low ints; to increase ints and ACTIVATE PAPI Rwy 05 and Rwy 23—CTAF. Ldg fee for commercial acft waived with fuel purchase.

**WEATHER DATA SOURCES:** ASOS 118.375 (517) 265-9089.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

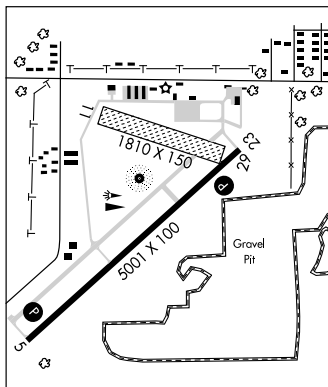
® TOLEDO APP/DEP CON 134.35

**RADIO AIDS TO NAVIGATION:** NOTAM FILE JXN.

JACKSON (L) VOR/DME 109.6 JXN Chan 33 N42°15.55'

W84°27.51' 149° 29 NM to fld. 995/5W.

ADRIAN NDB (MHW) 278 ADG N41°52.20' W84°04.65' at fld. NOTAM FILE ADG. Unmonitored.



**DETROIT**  
COPTER  
H-106, L-28J  
IAP

**AERONUT PARK BALLOONPORT** (See HOWELL)**ALBERT J LINDBERG** (See HESSEL)**ALLEGAN**

**PADGHAM FLD** (35D) 1 E UTC-5(-4DT) N42°31.83' W85°49.42'

706 B S4 FUEL 100LL NOTAM FILE LAN

RWY 11-29: H4300X75 (ASPH) S-18 MIRL

RWY 11: REIL. PAPI(P4L)—GA 3.0° TCH 40'. Trees.

RWY 29: REIL. PAPI(P4L)—GA 3.0° TCH 40'. Trees.

RWY 15-33: 1598X150 (TURF)

RWY 15: Trees. RWY 33: Trees.

**AIRPORT REMARKS:** Attended 1300Z±—dusk. Parachute Jumping. Rwy 15-33 surface rough. Rwy 15-33 marked with 3' yellow cones. ACTIVATE MIRL Rwy 11-29, PAPI Rwy 11 and Rwy 29, REIL Rwy 11 and Rwy 29—CTAF. Rwy 11-29 parallel twy marked with reflectors. Rwy 29 PAPI OTS infd.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

PULLMAN RCO 122.1R 112.1T (LANSING RADIO)

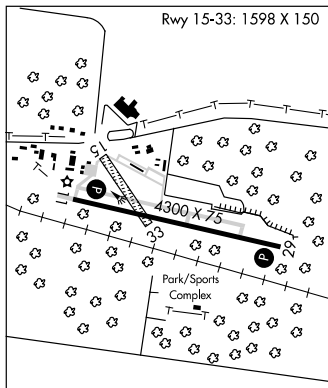
® GRAND RAPIDS APP/DEP CON 128.4 (1030-0500Z±)

® CHICAGO CENTER APP/DEP CON 128.5 (0500-1030Z±)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE LAN.

PULLMAN (H) VOR/DME 112.1 PMM Chan 58 N42°27.96'

W86°06.29' 073° 13.1 NM to fld. 640/OE.



**CHICAGO**  
L-28J  
IAP

**ALMA** N43°19.40' W84°47.18' NOTAM FILE AMN.

NDB (MHW) 329 AMN 096° 4.3 NM to Gratiot Community.

**DETROIT**  
L-28J

APP CRS  
**103°**

Rwy ldg **4300**  
TDZE **706**  
Apt Elev **706**

**RNAV (GPS) RWY 11**  
ALLEGAN / PADGHAM FIELD (35D)

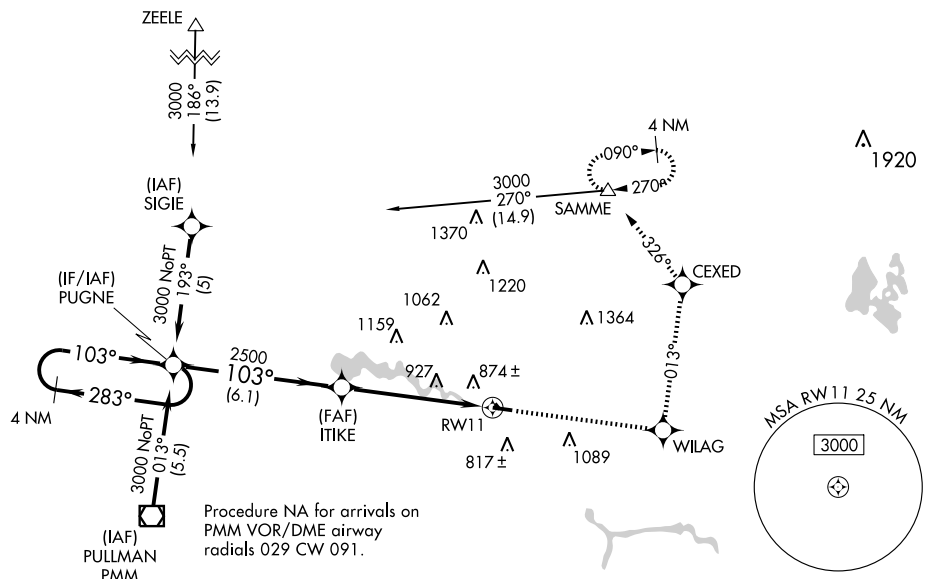
**▼** **▲** NA DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. Use Holland alimeter setting, when not received use Grand Rapids alimeter setting and increase all MDA 40 feet, increase Circling Cat C visibility ¼ mile.

MISSED APPROACH: Climb to 3000 direct WILAG and left turn on track 013° to CEXED and on track 326° to SAMME and hold.

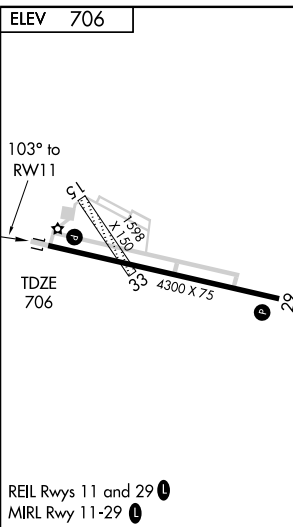
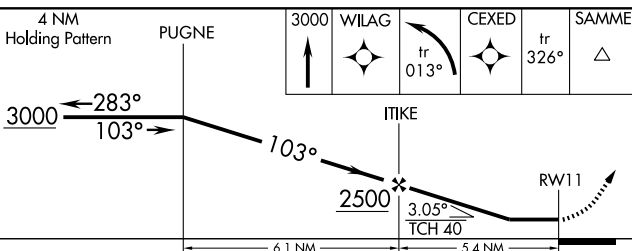
HOLLAND ASOS  
**119.025**

GRAND RAPIDS APP CON★  
**128.4 257.6**

UNICOM  
**122.8 (CTAF) 0**



Procedure NA for arrivals at AZO VOR/DME via V116 Eastbound.



CATEGORY	A	B	C	D
LNAV MDA	1220-1 514 (600-1)	1220-1½ 514 (600-1½)	1220-1½ 514 (600-1½)	NA
CIRCLING	1280-1 574 (600-1)	1280-1½ 574 (600-1½)	1280-1½ 574 (600-1½)	NA

REIL Rwy 11 and 29 **0**  
MRL Rwy 11-29 **0**



APP CRS **283°**  
 Rwy ldg **4300**  
 TDZE **705**  
 Apt Elev **706**

# RNAV (GPS) RWY 29

ALLEGAN / PADGHAM FIELD (35D)



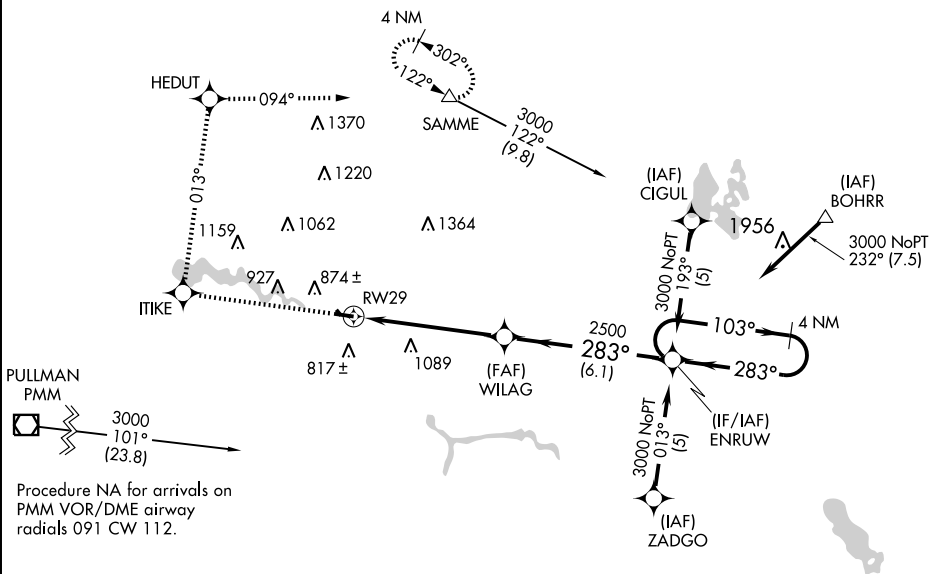
DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.  
 Use Holland altimeter setting, when not received use Grand Rapids altimeter setting and increase all MDA 40 feet.

MISSED APPROACH: Climb to 3000 direct ITIKE and right turn via track 013° to HEDUT and via track 094° to SAMME and hold.

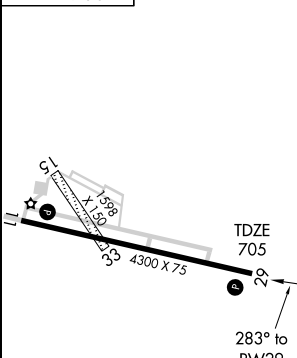
HOLLAND ASOS  
**119.025**

GRAND RAPIDS APP CON\*  
**128.4 257.6**

UNICOM  
**122.8 (CTAF) 0**



ELEV **706**



3000	ITIKE	HEDUT	SAMME	ENRUW	4 NM Holding Pattern
↑	tr 013°	tr 094°	△		
WILAG					
RWY 29					
2500					
3.04° TCH 40					
5.4 NM					
6.1 NM					
CATEGORY	A	B	C	D	
LNAV MDA	1380-1	675 (700-1)	1380-2 675 (700-2)	NA	
CIRCLING	1380-1	674 (700-1)	1380-2 674 (700-2)	NA	

VOR/DME PMM <b>112.1</b> Chan <b>58</b>	APP CRS <b>253°</b>	Rwy Idg TDZE Apt Elev	<b>4300</b> <b>705</b> <b>706</b>
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**VOR RWY 29**

ALLEGAN / PADGHAM FIELD (35D)

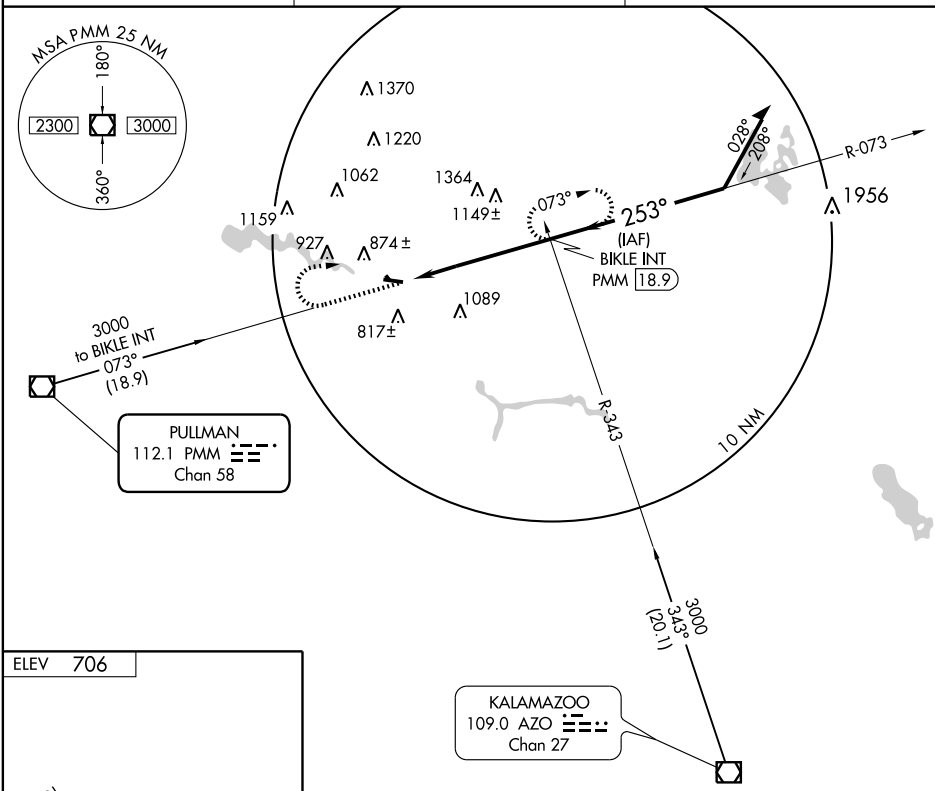
Visibility reduction by helicopters NA. Use Holland altimeter setting, when not received use Grand Rapids altimeter setting and increase all MDA 40 feet.

MISSED APPROACH: Climb to 3000 then right turn via PMM VOR/DME R-073 to BIKLE Int/PMM 18.9 DME and hold.

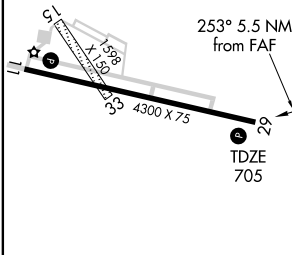
HOLLAND ASOS  
**119.025**

GRAND RAPIDS APP CON★  
**128.4 257.6**

UNICOM  
**122.8 (CTAF) 0**



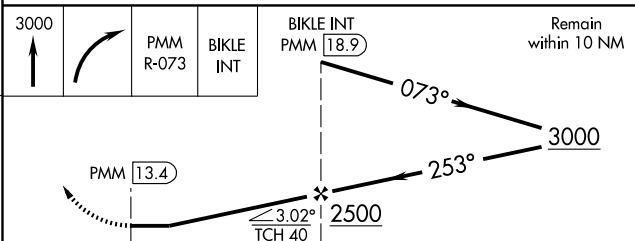
ELEV 706



REIL Rwy 11 and 29 0

MIRL Rwy 11-29 0

FAF to MAP 5.5 NM					
Knots	60	90	120	150	180
Min:Sec	5:30	3:40	2:45	2:12	1:50



CATEGORY	A	B	C	D
S-29	1460-1 755 (800-1)	1460-1¼ 755 (800-1¼)	1460-2¼ 755 (800-2¼)	NA
CIRCLING	1460-1 754 (800-1)	1460-1¼ 754 (800-1¼)	1460-2¼ 754 (800-2¼)	NA

## ALMA

**GRATIOT COMMUNITY** (AMN) 3 SW UTC-5(-4DT) N43°19.33' W84°41.28'

DETROIT

754 B S4 FUEL 100LL, JET A OX3 NOTAM FILE AMN

L-28J

RWY 09-27: H4999X75 (ASPH) S-40, D-65, 2S-82 MIRL

IAP

RWY 09: REIL. VASI(V2L)—GA 3.0° TCH 45'.

RWY 27: REIL. VASI(V2L)—GA 3.0° TCH 53'.

RWY 18-36: H3197X75 (ASPH) S-26 MIRL

RWY 18: Trees. RWY 36: Trees.

**AIRPORT REMARKS:** Attended Mon-Fri 1300-2130Z†. Powered parachute activity on and invof arpt. Animals on and invof arpt. ACTIVATE MIRL Rwy 09-27 and 18-36; VASI Rwy 09 and 27; REIL Rwy 09 and 27—CTAF.

**WEATHER DATA SOURCES:** AWOS-3 124.175 (989) 463-3433

**COMMUNICATIONS:** CTAF/UNICOM 122.8

Ⓡ SAGINAW APP/DEP CON 126.45 (1100-0400Z†) CLNC DEL 119.25

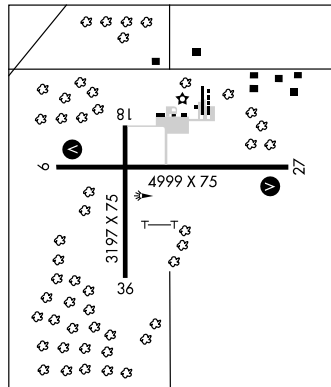
CLEVELAND CENTER APP/DEP CON 127.7 (0400-1100Z†)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE MBS.

SAGINAW (L) VORW/DME 112.9 MBS Chan 76 N43°31.90'

W84°04.64' 248° 29.5 NM to fld. 663/3W. HIWAS.

ALMA NDB (MWH) 329 AMN N43°19.40' W84°47.18' 096° 4.3 NM to fld. NOTAM FILE AMN.



## ALMENA (See PAW PAW)

## ALPENA

**ALPENA CO RGNL** (APN) 6 W UTC-5(-4DT) N45°04.69' W83°33.62'

LAKE HURON

690 B S2 FUEL 100LL, JET A LRA Class I, ARFF Index A NOTAM FILE APN

H-11A, L-31C

RWY 01-19: H9001X150 (CONC-GRVD) S-95, D-115, 2S-170, 2T-560, 2D/2D2-468 HIRL

IAP

RWY 01: MALSR. PAPI(P4L)—GA 3.0° TCH 52'. Tree.

RWY 19: REIL. PAPI(P4L)—GA 3.0° TCH 36'. Tree.

RWY 07-25: H5028X100 (CONC-GRVD) S-93, D-111, 2S-170,

2T-553, 2D/2D2-438 MIRL

RWY 07: REIL. PAPI(P4L)—GA 3.0° TCH 40'. Trees.

RWY 25: REIL. PAPI(P4L)—GA 3.0° TCH 40'. Trees.

**RUNWAY DECLARED DISTANCE INFORMATION**

RWY 01: TORA-9001 TODA-9001 ASDA-9001 LDA-9001

RWY 07: TORA-5031 TODA-5031 ASDA-5031 LDA-5031

RWY 19: TORA-9001 TODA-9001 ASDA-9001 LDA-9001

RWY 25: TORA-5031 TODA-5031 ASDA-5031 LDA-5031

**ARRESTING GEAR/SYSTEM**

RWY 01 BAK 14 BAK-12A(B) (1500')

BAK 14 BAK-12A(B) (1500') RWY 19

**AIRPORT REMARKS:** Attended 1200-0000Z†. For svc after hrs call 989-920-7988. Birds and other wildlife on and invof arpt. Twy H, east of Rwy 01-19 clsd to military acft. Twy B not visible from twr. Twy A west of Twy C and Twy B rstd to military only. Be alert for uncontrolled vehicles on the twy. Twy to maintenance hangars unlit. 48 hrs PPR for air carrier ops with more than 30 passenger seats—call arpt manager 989-354-2907. ACTIVATE HIRL Rwy 01-19; MIRL Rwy 07-25; REIL Rwy 19, Rwy 07 and Rwy 25; and MALSR Rwy 01—CTAF. ANG-72 hr PPR; ctc Base OPS DSN 741-3226, C989-354-6226 for PPR number. ANG duty hrs Mon-Fri 1300-2130Z† except holidays.

**WEATHER DATA SOURCES:** ASOS 120.675 (989) 356-3662.

HIWAS 108.8 APN.

**COMMUNICATIONS:** CTAF 121.35 UNICOM 122.95

RCO 122.1R 108.8T (LANSING RADIO)

Ⓡ MINNEAPOLIS CENTER APP/DEP CON 125.475 (2100-1300Z†)

Ⓡ APP/DEP CON 128.425 (1300-2100Z†).

TOWER 121.35 (Weekdays 1300-2100Z† except holidays.) GND CON 121.9

**AIRSPACE:** CLASS D svc Weekdays 1300-2100Z† except holidays other times CLASS E.

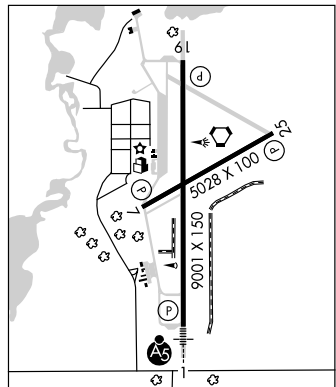
**RADIO AIDS TO NAVIGATION:** NOTAM FILE APN.

(L) VORTAC 108.8 APN Chan 25 N45°04.97' W83°33.42' at fld. 677/7W. HIWAS.

DME portion unusable 260°-280°, byd 30 NM blo 4000'.

FELPS NDB (LOM) 206 AP N44°57.65' W83°33.61' 007° 7 NM to fld.

ILS 109.7 I-APN Rwy 01. Class I E. LOM FELPS NDB. ILS unmonitored when twr closed.



APP CRS	Rwy Idg	<b>4999</b>
<b>095°</b>	TDZE	<b>752</b>
	Apt Elev	<b>754</b>

# RNAV (GPS) RWY 9

ALMA/GRATIOT COMMUNITY (AMN)

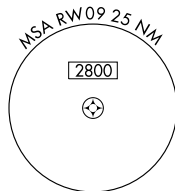
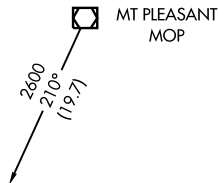
 NA	GPS or RNP-0.3 required.	MISSED APPROACH: Climb to 2600 direct CEGEE WP and hold.
	DME/DME RNP-0.3 NA.	
	Circling NA at night to Rwys 18 and 36.	

AWOS-3  
**124.175**

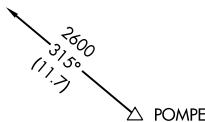
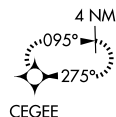
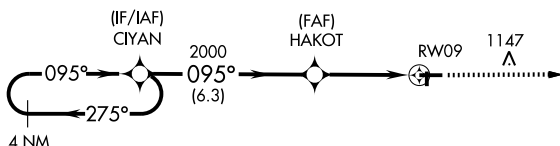
SAGINAW APP CON ★  
**126.45 235.625**

CLNC DEL  
**119.25**

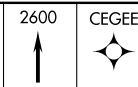
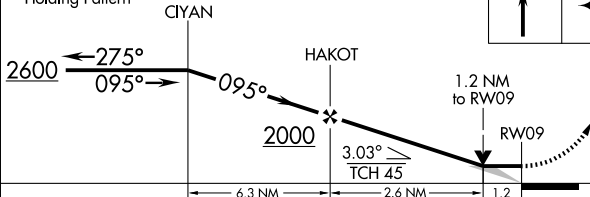
UNICOM  
**122.8 (CTAF)**



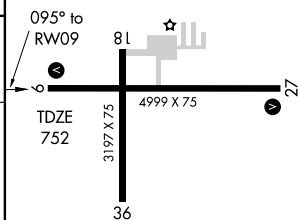
1742 Δ



4 NM  
Holding Pattern



ELEV 754



CATEGORY	A	B	C	D
LNAV MDA	1160-1	408 (500-1)	1160-1¼	408 (500-1¼)
CIRCLING	1180-1 426 (500-1)	1220-1 466 (500-1)	1220-1½ 466 (500-1½)	1320-2 566 (600-2)

REIL Rwys 9 and 27   
MIRL Rwys 9-27 and 18-36

APP CRS **185°**  
 Rwy Idg **3197**  
 TDZE **754**  
 Apt Elev **754**

# RNAV (GPS) RWY 18

ALMA/GRATIOT COMMUNITY (AMN)

GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.  
 Straight-in minimums NA at night.  
 Circling NA at night to Rwy 18 and 36.

MISSED APPROACH: Climbing right turn to 2800  
 direct OREYO WP and hold.

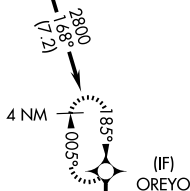
AWOS-3  
**124.175**

SAGINAW APP CON ★  
**126.45 235.625**

CLNC DEL  
**119.25**

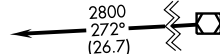
UNICOM  
**122.8 (CTAF) 0**

(IAF) MT PLEASANT MOP  
 Procedure NA for arrivals on MOP VOR/DME  
 airway radials 106 CW 183.

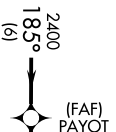


▲ 1742

(IAF) SAGINAW MBS



Procedure NA for arrivals on  
 MBS VOR/DME airway radials  
 212 CW 320.

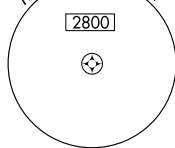


KAYEL  
 2 NM to  
 RW18

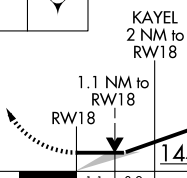
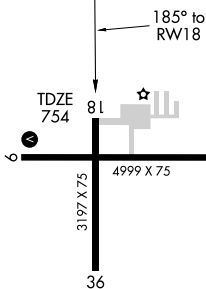
▲ 1147



MSA RW18 25 NM



ELEV 754



PAYOT  
 2400

OREYO

2800

Procedure  
 Turn NA



CATEGORY	A	B	C	D
LNAV MDA	1160-1	406 (500-1)	1160-1½ 406 (500-1½)	NA
CIRCLING	1180-1 426 (500-1)	1220-1 466 (500-1)	1220-1½ 466 (500-1½)	NA

REIL Rwy 9 and 27 0  
 MRL Rwy 9-27 and 18-36 0

APP CRS <b>275°</b>	Rwy Idg TDZE Apt Elev	<b>4999</b> <b>754</b> <b>754</b>
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# RNAV (GPS) RWY 27

## ALMA/GRATIOT COMMUNITY (AMN)

	GPS or RNP-0.3 required.
 NA	DME/DME RNP-0.3 NA.
	Circling NA at night to Rwy 18 and 36.

**MISSED APPROACH:** Climbing right turn to 2600 direct CEGEE WP and hold.

AWOS-3  
**124.175**

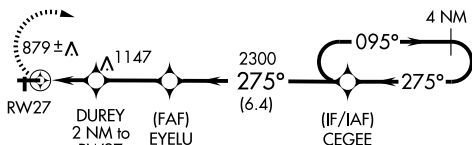
SAGINAW APP CON ★  
126.45 235.625

CLNC DEL  
**119.25**

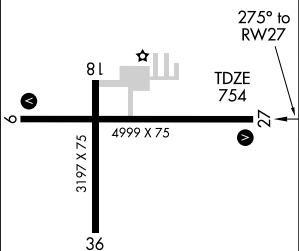
UNICOM  
122.8 (CTAF) **L**

Procedure NA for arrivals on MBS VOR/DME  
airway radials 212 CW 284.

SAGINAW  
MBS

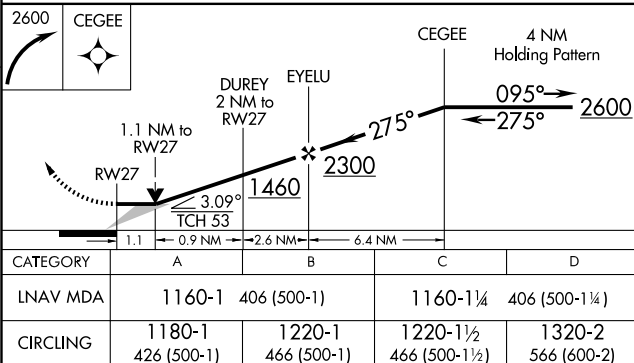
 $1850 \pm \Delta$ 

ELEV 754



REIL Rwy 9 and 27 **L**  
MIRL Rwy 9-27 and 18-36 **L**

### Procedure NA for arrivals at LUGGS on V45 southbound.



ALMA, MICHIGAN  
Orig 10154

ALMA/GRATIOT COMMUNITY (AMN)  
RNAV (GPS) RWY 27

43°19'N - 84°41'W

EC-1. 23 SEP 2010 to 21 OCT 2010

VOR/DME MOP <b>110.6</b> Chan <b>43</b>	APP CRS <b>178°</b>	Rwy Idg TDZE Apt Elev	<b>3197</b> <b>754</b> <b>754</b>
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# VOR/DME RWY 18

ALMA/GRATIOT COMMUNITY (AMN)

▼  
▲ NA


MISSED APPROACH: Climb to 1200, then climbing right turn to 2600 via MOP R-178 to FILKO/7 DME and hold.

AWOS-3  
**124.175**

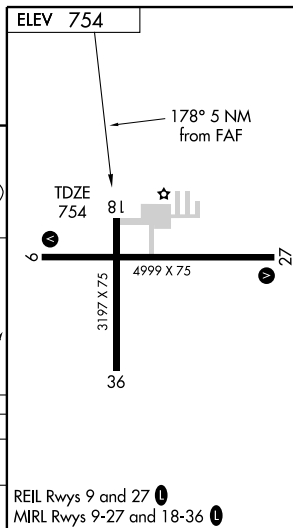
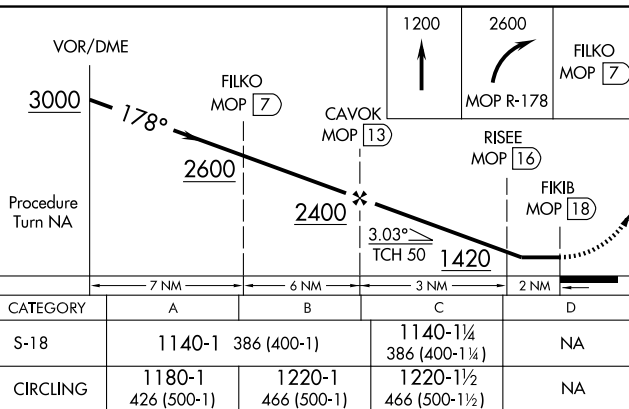
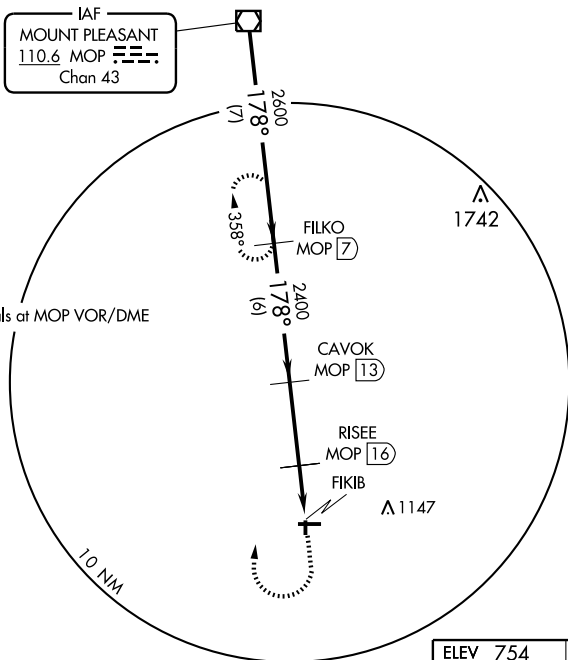
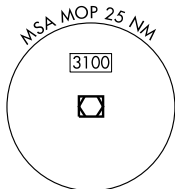
SAGINAW APP CON ★  
**126.45 235.625**

CLNC DEL  
**119.25**

UNICOM  
**122.8** (CTAF) **0**

IAF  
MOUNT PLEASANT  
110.6 MOP   
Chan 43

Procedure NA for arrivals at MOP VOR/DME via V233 Northbound.



## ALMA

**GRATIOT COMMUNITY** (AMN) 3 SW UTC-5(-4DT) N43°19.33' W84°41.28'

DETROIT

754 B S4 FUEL 100LL, JET A OX3 NOTAM FILE AMN

L-28J

RWY 09-27: H4999X75 (ASPH) S-40, D-65, 2S-82 MIRL

IAP

RWY 09: REIL. VASI(V2L)—GA 3.0° TCH 45'.

RWY 27: REIL. VASI(V2L)—GA 3.0° TCH 53'.

RWY 18-36: H3197X75 (ASPH) S-26 MIRL

RWY 18: Trees. RWY 36: Trees.

**AIRPORT REMARKS:** Attended Mon-Fri 1300-2130Z†. Powered parachute activity on and invof arpt. Animals on and invof arpt. ACTIVATE MIRL Rwy 09-27 and 18-36; VASI Rwy 09 and 27; REIL Rwy 09 and 27—CTAF.

**WEATHER DATA SOURCES:** AWOS-3 124.175 (989) 463-3433

**COMMUNICATIONS:** CTAF/UNICOM 122.8

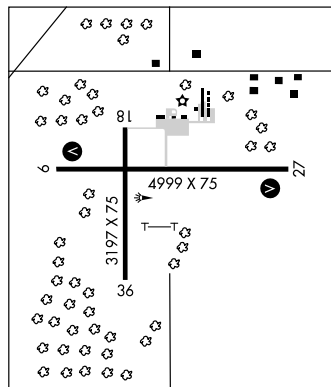
Ⓡ SAGINAW APP/DEP CON 126.45 (1100-0400Z†) CLNC DEL 119.25  
CLEVELAND CENTER APP/DEP CON 127.7 (0400-1100Z†)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE MBS.

SAGINAW (L) VORW/DME 112.9 MBS Chan 76 N43°31.90'

W84°04.64' 248° 29.5 NM to fld. 663/3W. HIWAS.

ALMA NDB (MWH) 329 AMN N43°19.40' W84°47.18' 096° 4.3 NM to fld. NOTAM FILE AMN.



## ALMENA (See PAW PAW)

## ALPENA

**ALPENA CO RGNL** (APN) 6 W UTC-5(-4DT) N45°04.69' W83°33.62'

LAKE HURON

690 B S2 FUEL 100LL, JET A LRA Class I, ARFF Index A NOTAM FILE APN

H-11A, L-31C

RWY 01-19: H9001X150 (CONC-GRVD) S-95, D-115, 2S-170, 2T-560, 2D/2D2-468 HIRL

IAP

RWY 01: MALSR. PAPI(P4L)—GA 3.0° TCH 52'. Tree.

RWY 19: REIL. PAPI(P4L)—GA 3.0° TCH 36'. Tree.

RWY 07-25: H5028X100 (CONC-GRVD) S-93, D-111, 2S-170, 2T-553, 2D/2D2-438 MIRL

RWY 07: REIL. PAPI(P4L)—GA 3.0° TCH 40'. Trees.

RWY 25: REIL. PAPI(P4L)—GA 3.0° TCH 40'. Trees.

**RUNWAY DECLARED DISTANCE INFORMATION**

RWY 01: TORA-9001 TODA-9001 ASDA-9001 LDA-9001

RWY 07: TORA-5031 TODA-5031 ASDA-5031 LDA-5031

RWY 19: TORA-9001 TODA-9001 ASDA-9001 LDA-9001

RWY 25: TORA-5031 TODA-5031 ASDA-5031 LDA-5031

**ARRESTING GEAR/SYSTEM**

RWY 01 BAK 14 BAK-12A(B) (1500')

BAK 14 BAK-12A(B) (1500') RWY 19

**AIRPORT REMARKS:** Attended 1200-0000Z†. For svc after hrs call 989-920-7988. Birds and other wildlife on and invof arpt. Twy H, east of Rwy 01-19 clsd to military acft. Twy B not visible from twr. Twy A west of Twy C and Twy B rstd to military only. Be alert for uncontrolled vehicles on the twy. Twy to maintenance hangars unlit. 48 hrs PPR for air carrier ops with more than 30 passenger seats—call arpt manager 989-354-2907. ACTIVATE HIRL Rwy 01-19; MIRL Rwy 07-25; REIL Rwy 19, Rwy 07 and Rwy 25; and MALSR Rwy 01—CTAF. ANG-72 hr PPR; ctc Base OPS DSN 741-3226, C989-354-6226 for PPR number. ANG duty hrs Mon-Fri 1300-2130Z† except holidays.

**WEATHER DATA SOURCES:** ASOS 120.675 (989) 356-3662.

HIWAS 108.8 APN.

**COMMUNICATIONS:** CTAF 121.35 UNICOM 122.95

RCO 122.1R 108.8T (LANSING RADIO)

Ⓡ MINNEAPOLIS CENTER APP/DEP CON 125.475 (2100-1300Z†)

Ⓡ APP/DEP CON 128.425 (1300-2100Z†).

TOWER 121.35 (Weekdays 1300-2100Z† except holidays.) GND CON 121.9

**AIRSPACE:** CLASS D svc Weekdays 1300-2100Z† except holidays other times CLASS E.

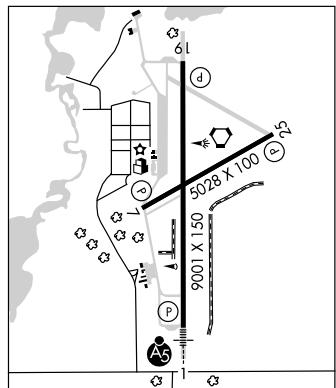
**RADIO AIDS TO NAVIGATION:** NOTAM FILE APN.

(L) VORTAC 108.8 APN Chan 25 N45°04.97' W83°33.42' at fld. 677/7W. HIWAS.

DME portion unusable 260°-280°, byd 30 NM blo 4000'.

FELPS NDB (LOM) 206 AP N44°57.65' W83°33.61' 007° 7 NM to fld.

ILS 109.7 I-APN Rwy 01. Class IE. LOM FELPS NDB. ILS unmonitored when twr closed.



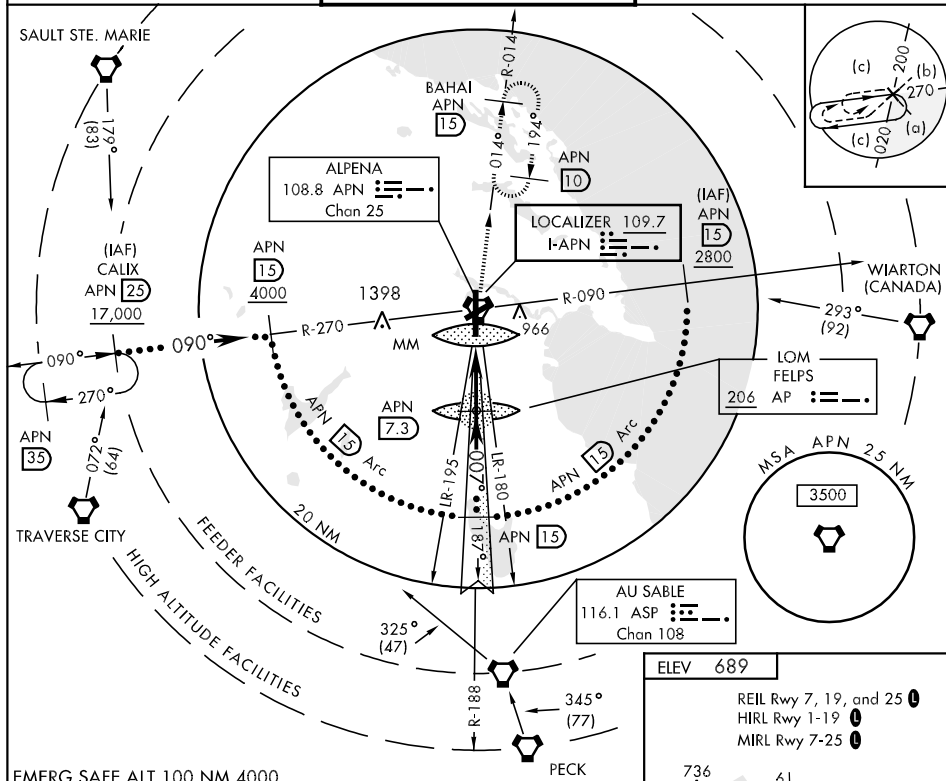


LOC I-APN <b>109.7</b>	APCH CRS <b>007°</b>	Rwy ldg TDZE <b>685</b> Arpt Elev <b>689</b>
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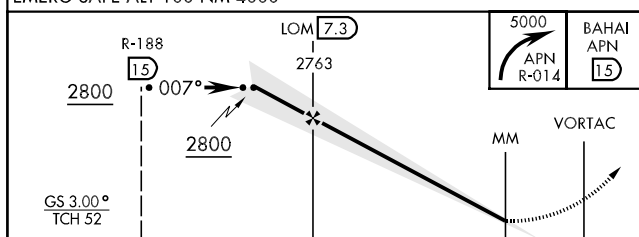
JAL-718 [USAF]

ALPENA COUNTY RGNL (KAPN)

<b>T</b>	MALSR <b>A5</b>	MISSED APPROACH: Climb to 5000 via R-014 to BAHAI 15 DME and hold.
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ALPENA APP CON  
**128.425 379.3**ALPENA TOWER ★  
**121.35 (CTAF) 0 318.1**GND CON  
**121.9 275.8**

EMERG SAFE ALT 100 NM 4000

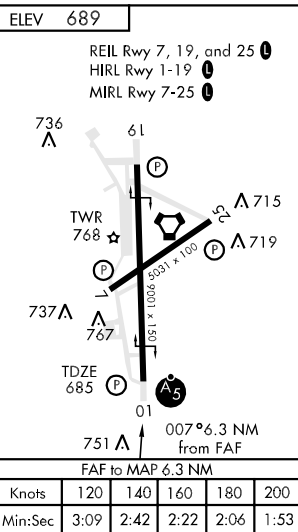


CATEGORY	C	D	E
S-ILS 1	885-½	200 (200-½)	
S-LOC 1	1140-¾ 455 (500-¾)	1140-1 455 (500-1)	
CIRCLING	1140-1½ 451 (500-1½)	1240-2 551 (600-2)	1280-2 591 (600-2)

ALPENA, MICHIGAN

45°05'N-83°34'W

Amdt 4 09351



ALPENA COUNTY RGNL (KAPN)

HI-ILS/DME RWY 1

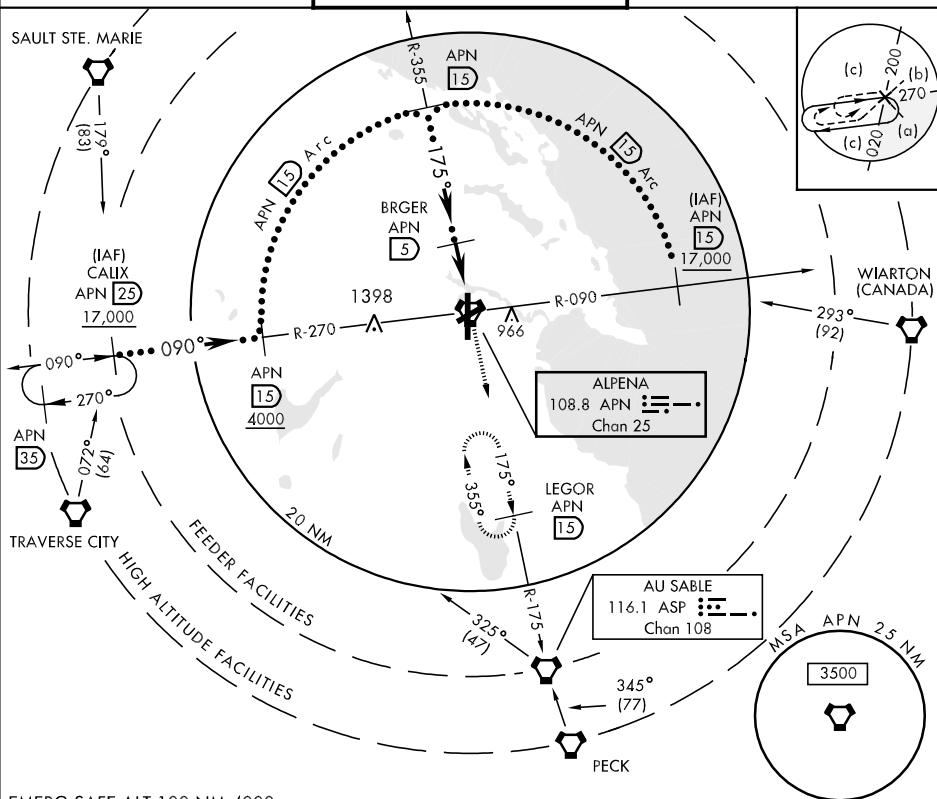
HI-TACAN RWY 19

ALPENA COUNTY RGNL (KAPN)

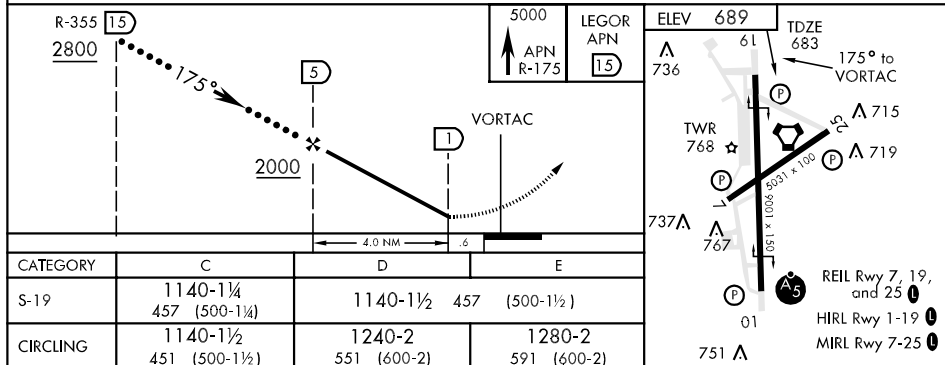
**T**

**MISSED APPROACH:** Climb to 5000 via R-175 to LEGOR 15 DME and hold.

GND CON  
121.9 275.8



EMERG SAFE ALT 100 NM 4000



ALPENA COUNTY RGNL (KAPN)

HI-TACAN RWY 19

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010

ALPENA, MICHIGAN

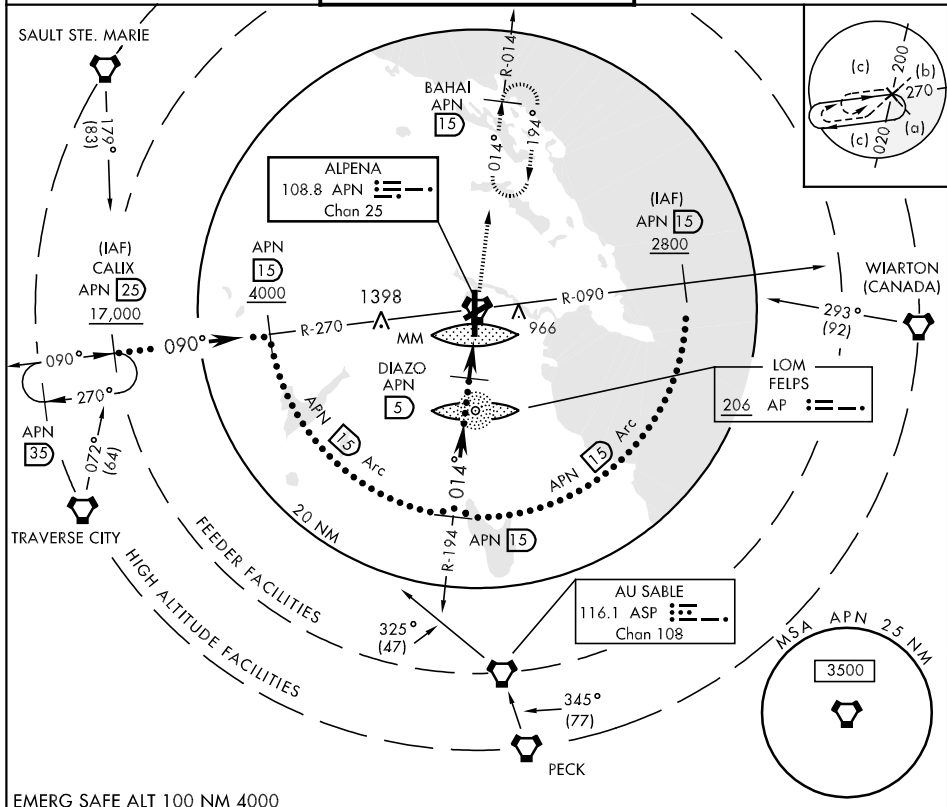
HI-VOR/DME or TACAN RWY 1

VORTAC APN 108.8 Chan 25	APCH CRS 014°	Rwy ldg TDZE 685 Arpt Elev 689
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JAL-718 [USAF]

ALPENA COUNTY RGNL (KAPN)

<b>T</b>	MALSR A5	MISSED APPROACH: Climb to 5000 via R-014 to BAHAI 1.5 DME and hold.
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ALPENA APP CON  
128.425 379.3ALPENA TOWER ★  
121.35 (CTAF) 0 318.1GND CON  
121.9 275.8

EMERG SAFE ALT 100 NM 4000

R-194 2800	DIAZO 5	5000 APN R-014	BAHAI APN 15	ELEV 689 A 736	REIL Rwy 7, 19, and 25 0	HIRL Rwy 1-19 0	MIRL Rwy 7-25 0
1600	1.6	VORTAC		TWR 768	A 715	A 719	
		3.4 NM		737A	A 767		
TDZE 685				01	014° to VORTAC		
CATEGORY	C	D	E				
S-1	1140-3/4 455 (500-3/4)	1140-1 455 (500-1)					
CIRCLING	1140-1 1/2 451 (500-1 1/2)	1240-2 551 (600-2)	1280-2 591 (600-2)				

ALPENA, MICHIGAN  
09351

45° 05'N-83° 34'W

ALPENA COUNTY RGNL (KAPN)



HI-VOR/DME or TACAN RWY 1

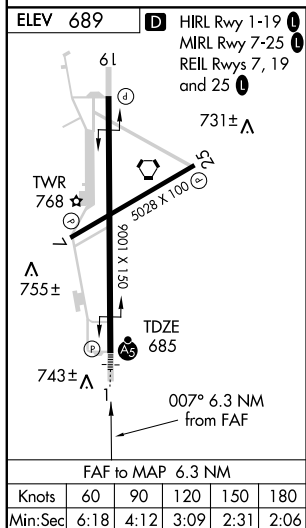
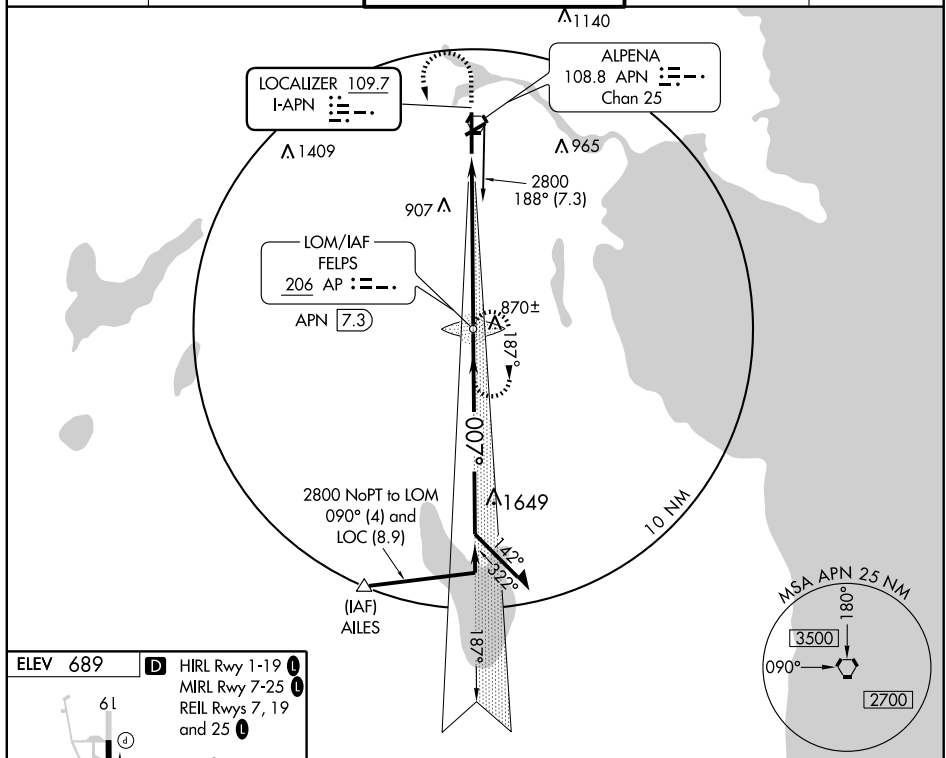
EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010

LOC I-APN <b><u>109.7</u></b>	APP CRS <b>007°</b>	Rwy Idg TDZE Apt Elev	<b>9001</b> <b>685</b> <b>689</b>
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ILS or LOC RWY 1  
ALPENA COUNTY RGNL (APN)

 When local altimeter setting not received, use Roger city altimeter setting and increase all DA 55 feet and all MDA 60 feet and increase S-LOC 1 Cats C and D visibility ¼ mile. ADF Required.		 MALSR	MISSED APPROACH: Climb to 1100 then climbing left turn to 2800 direct AP LOM and hold.	
ASOS <b>120.675</b>	ALPENA APP CON ★ <b>128.425 379.3</b>	ALPENA TOWER ★ <b>121.35 (CTAF) 0 318.1</b>		GND CON <b>121.9 275.8</b>
UNICOM <b>122.95</b>				

[illegible]

NDB RWY 1

ALPENA COUNTY RGNL (APN)

LOM AP <b>206</b>	APP CRS <b>007°</b>	Rwy Idg TDZE Apt Elev	<b>9001</b> <b>685</b> <b>689</b>
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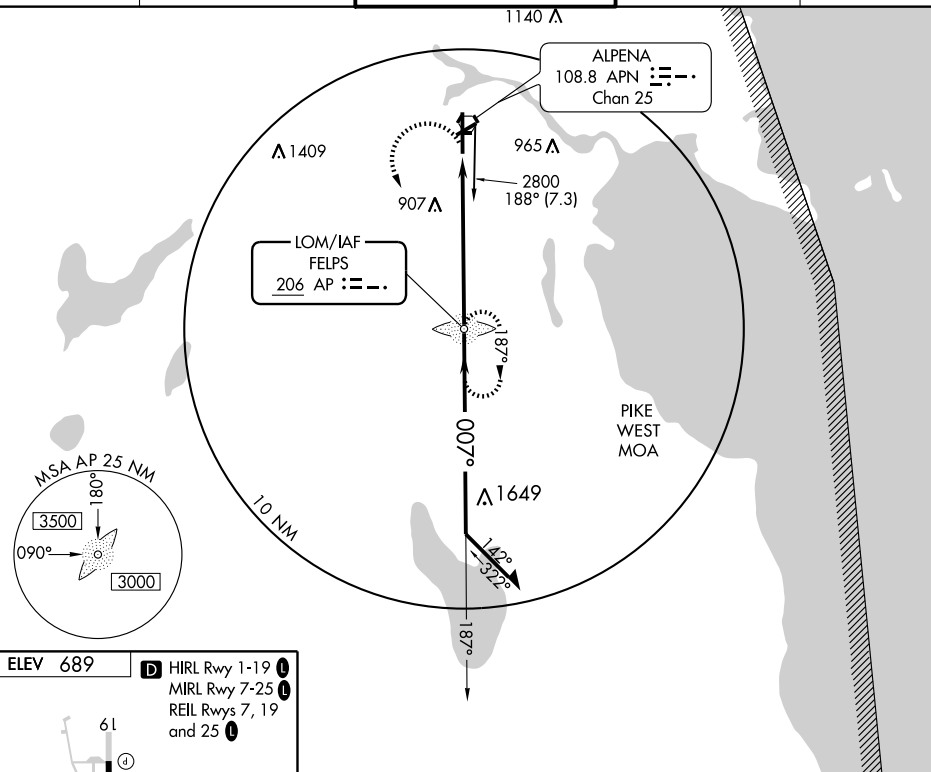
**NA** When local altimeter setting not received, use Roger City altimeter setting and increase all MDA 60 feet and Cat C and D visibility ¼ mile.

MALSR

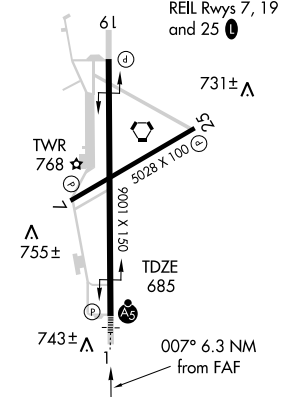


MISSED APPROACH: Climbing left turn to 2800 direct AP LOM and hold.

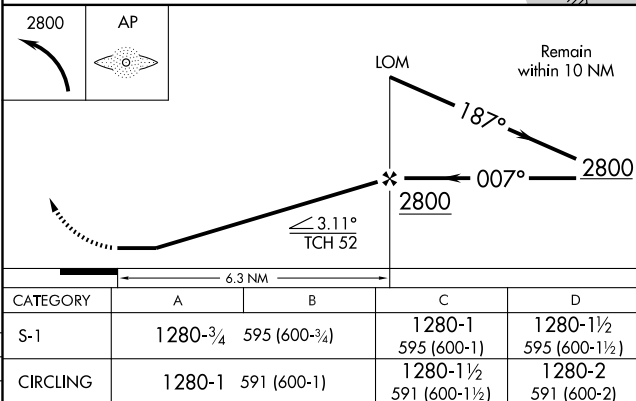
ASOS <b>120.675</b>	ALPENA APP CON ★ <b>128.425 379.3</b>	ALPENA TOWER ★ <b>121.35(CTAF) 318.1</b>	GND CON <b>121.9 275.8</b>	UNICOM <b>122.95</b>
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ELEV 689 **D** HIRL Rwy 1-19  
MIRL Rwy 7-25  
REIL Rwy 7, 19  
and 25



Knots	60	90	120	150	180
Min:Sec	6:18	4:12	3:09	2:31	2:06



WAAS CH <b>50310</b> <b>W01A</b>	APP CRS <b>007°</b>	Rwy Idg TDZE Apt Elev	<b>9001</b> <b>685</b> <b>689</b>
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# RNAV (GPS) RWY 1

ALPENA COUNTY RGNL (APN)

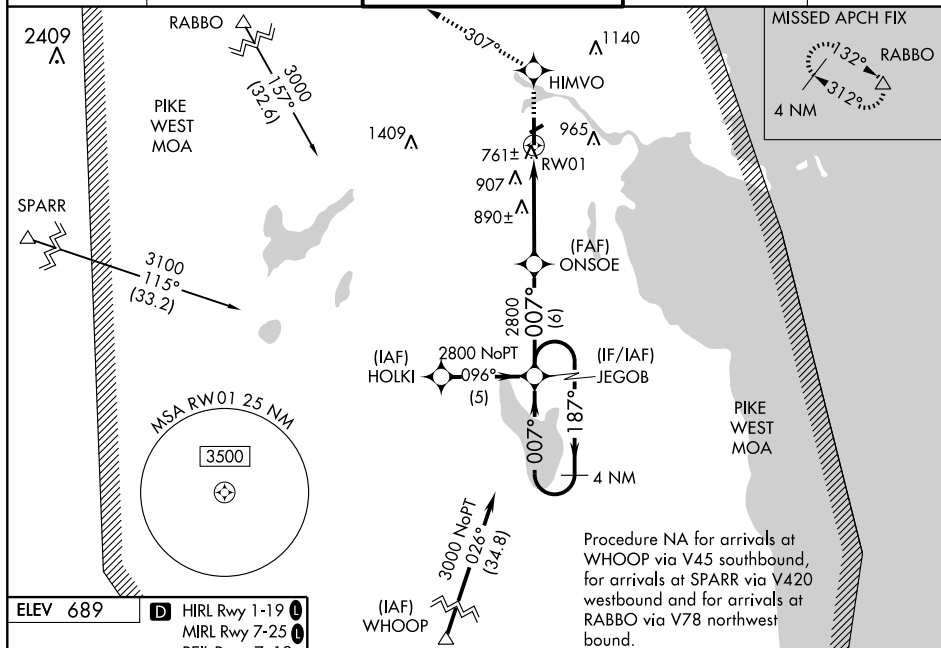
**▼** For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 48°C (118°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Rogers City altimeter setting and increase all DA 55 feet and all MDA 60 feet and increase LPV all Cats, LNAV/VNAV all Cats and LNAV Cats C and D visibilities ¼ mile. Baro-VNAV and VDP NA when using Rogers City altimeter setting. For inoperative MALSR, increase LPV all Cats visibility to 1.

MALSR

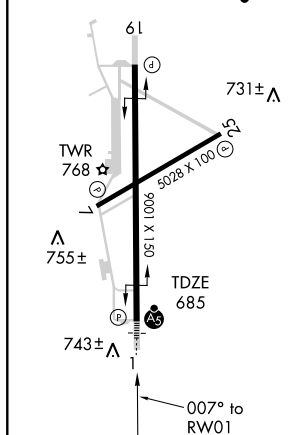


**MISSED APPROACH:** Climb to 3500 direct HIMVO and via 307° track to RABBO and hold.

ASOS <b>120.675</b>	ALPENA APP CON ★ <b>128.425 379.3</b>	ALPENA TOWER ★ <b>121.35 (CTAF) 318.1</b>	GND CON <b>121.9 275.8</b>	UNICOM <b>122.95</b>
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ELEV 689	<b>D</b> HIRL Rwy 1-19 MIRL Rwy 7-25 REIL Rws 7, 19 and 25
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4 NM Holding Pattern	JEGOB	ONSOE	3500	HIMVO	307° tr	RABBO
<p>2800 <math>\xleftarrow{187^\circ}</math> <math>\xrightarrow{007^\circ}</math> 007° <math>\xrightarrow{2800}</math></p> <p>GS 3.00° TCH 52 VGSI and RNAV glidepath not coincident.</p> <p>*1.3 NM to RW01 *LNAV only</p> <p>6 NM 5 NM 1.3</p>						
CATEGORY	A	B	C	D		
LPV DA	974-½		289 (300-½)			
LNAV/VNAV DA	1029-¾		344 (400-¾)			
LNAV MDA	1160-½	475 (500-½)	1160-¾ 475 (500-¾)	1160-1 475 (500-1)		
CIRCLING	1160-1	471 (500-1)	1160-1 ½ 471 (500-1½)	1260-2 571 (600-2)		

WAAS CH <b>53717</b> <b>W19A</b>	APP CRS <b>187°</b>	Rwy Idg TDZE Apt Elev	<b>9001</b> <b>683</b> <b>690</b>
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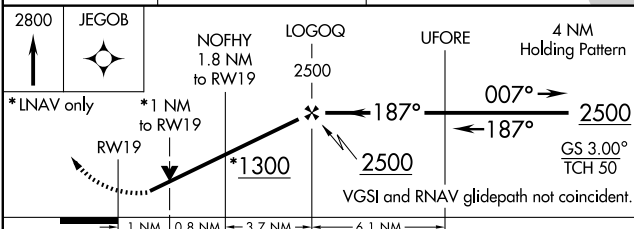
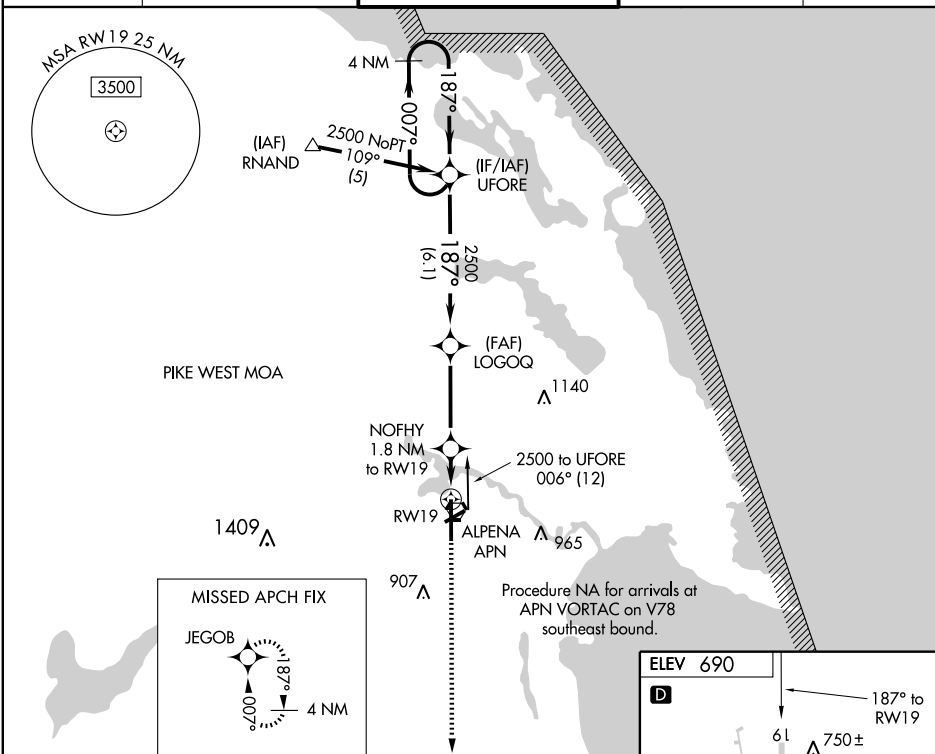
# RNAV (GPS) RWY 19

ALPENA COUNTY RGNL (APN)

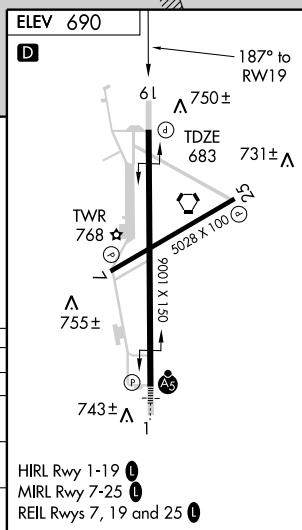
**▼** For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 2800 direct JEGOB and hold.

ASOS <b>120.675</b>	ALPENA APP CON ★ <b>128.425 379.3</b>	ALPENA TOWER ★ <b>121.35 (CTAF) 318.1</b>	GND CON <b>121.9 275.8</b>	UNICOM <b>122.95</b>
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CATEGORY	A	B	C	D
LPV DA	933-3/4 250 (300-3/4)			
LNAV/VNAV DA	1020-1 337 (400-1 1/4)			
LNAV MDA	1020-1 337 (400-1)			
CIRCLING	1120-1 430 (500-1)	1140-1 450 (500-1)	1140-1 1/2 450 (500-1 1/2)	1240-2 550 (600-2)



VORTAC APN	APP CRS	Rwy Idg	9001
108.8	014°	TDZE	685
Chan 25		Apt Elev	689

VOR RWY 1  
ALPENA COUNTY RGNL (APN)



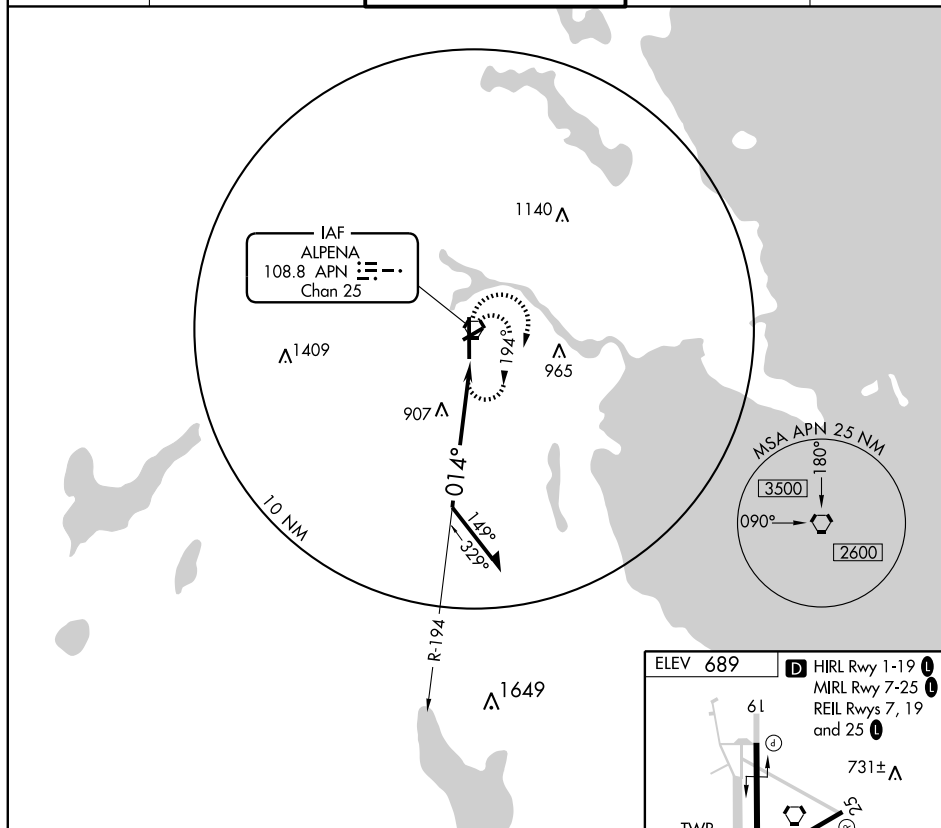
**MISSED APPROACH:** Climbing right turn to 2800 in APN VORTAC holding pattern.

ASOS  
120,675

ALPENA APP CON ★  
128.425 379.3

ALPENA TOWER ★  
121.35 (CTAF) **L** 318.1

GND CON  
121.9 275.8

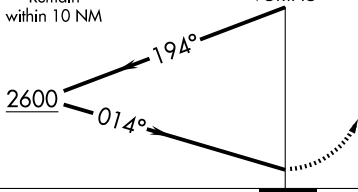
UNICOM  
122.95

Remain  
within 10 NM

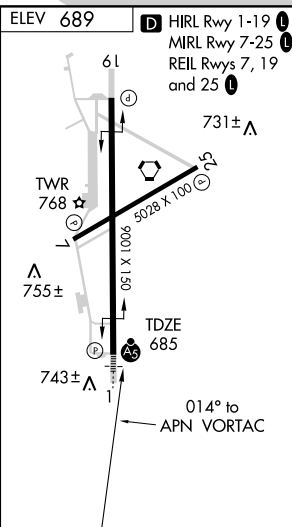
VORTAC

2800

APN



CATEGORY	A	B	C	D
S-1	1280-3/4	595 (600-3/4)	1280-1 595 (600-1)	1280-1 1/4 595 (600-1 1/4)
CIRCLING	1280-1	591 (600-1)	1280-1 1/2 591 (600-1 1/2)	1280-2 591 (600-2)

ALPENA, MICHIGAN  
Amdt 14C 06MAY10

45°05'N - 83°34'W

ALPENA COUNTY RGNL (APN)  
VOR RWY 1

EC-1. 23 SEP 2010 to 21 OCT 2010





## AIRPORT DIAGRAM

AL-5506 (FAA)

ANN ARBOR MUNI (ARB)  
ANN ARBOR, MICHIGAN

ATIS  
134.55  
ANN ARBOR TOWER ★  
120.3  
GND CON  
121.6  
CLNC DEL  
121.6

JANUARY 2010  
ANNUAL RATE OF CHANGE  
0.1° W

900 A FIRE  
STATION

ADMINISTRATION  
AND  
TERMINAL

TWR

TOWER  
BASE BLDG

BIJAN AIR

42°13.5' N

FIELD  
ELEV  
839

ELEV  
831

ELEV  
826

ELEV  
822

RWY 06-24  
S-45, D-70

42°13.0' N

CAUTION: BE ALERT TO RUNWAY CROSSING INSTRUCTIONS.  
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

83°45.0' W

83°44.5' W

## AIRPORT DIAGRAM

ANN ARBOR, MICHIGAN  
ANN ARBOR MUNI (ARB)

**SILVER CITY AIRPARK** (53M) 4 N UTC-5(-4DT) N45°07.94' W83°26.88'

LAKE HURON

680 TPA-1480 (800) NOTAM FILE LAN

RWY 08-26: 2400X100 (TURF)

RWY 08: Thld dsplcd 600'. Trees.

RWY 26: Thld dsplcd 400'. Trees.

**AIRPORT REMARKS:** Unattended. Arpt CLOSED Nov-Mar and when snow covered except for ski equipped acft. No snow removal. 300' antenna 1/5 mile N of arpt. 30' p-lines in Rwy 08 apch not marked. 35' p-line in Rwy 26 apch marked with orange balls. Rwy 08-26 and dsplcd thlds marked with 3' yellow cones.

**COMMUNICATIONS:** CTAF 122.9

**ANDREWS UNIVERSITY AIRPARK** (See BERRIEN SPRINGS)

**ANN ARBOR MUNI** (ARB) 3 S UTC-5(-4DT) N42°13.38' W83°44.74'

DETROIT

839 B S4 FUEL 100LL, JET A OX 1, 2, 3, 4 NOTAM FILE ARB

COPTER

RWY 06-24: H3505X75 (CONC-GRVD) S-45, D-70 MIRL

L-28J, A

RWY 06: REIL. PAPI(P4L). Trees.

IAP, AD

RWY 24: ODALS. VASI(V2L)-GA 3.0° TCH 20'. Trees.

RWY 12-30: 2750X110 (TURF) 0.6% up NW

RWY 12: Trees.

RWY 30: Trees.

**AIRPORT REMARKS:** Attended Nov-Mar 1300-0100Z, Apr-Oct 1300-2300Z. Terminal open 1200Z-dusk. Birds on and invof arpt. Runup area to Rwy 24 and first 200' of parallel twy from the runup area of Rwy 24' not visible and uncontrolled by twr. When twr clsd, confirm snow removal ops and winter conditions-CTAF. No snow removal for Rwy 12-30. Rwy 12-30 marked with yellow cones. When twr clsd ACTIVATE ODALS Rwy 24-CTAF.

**WEATHER DATA SOURCES:** ASOS 134.55 (734) 668-7173.

LAWRS.

**COMMUNICATIONS:** CTAF 120.3 ATIS 134.55 UNICOM 123.0

Ⓡ DETROIT APP/DEP CON 118.95

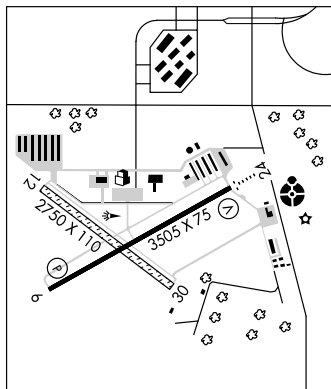
TOWER 120.3 (1300-0100Z) GND CON 121.6 CLNC DEL 121.6

**AIRSPACE:** CLASS D svc 1300-0100Z other times CLASS G.

**RADIO AIDS TO NAVIGATION:** NOTAM FILE LAN.

SALEM (L) VORTAC 114.3 SVM Chan 90 N42°24.53'

W83°35.65' 214° 13 NM to fld. 950/3W.



**ANTRIM CO** (See BELLAIRE)

**ARCHER MEML FLD** (See ST JOHNS)

**ARNOLD FLD** (See CROSWELL)

**ATHELONE WILLIAMS MEML** (See DAVISON)

**ATLANTA MUNI** (Y93) 1 SE UTC-5(-4DT) N45°00.00' W84°08.00'

LAKE HURON

875 FUEL 100LL NOTAM FILE LAN

L-31C

RWY 13-31: 3223X100 (TURF) LIRL

RWY 13: Thld dsplcd 758'. Trees.

RWY 31: Thld dsplcd 569'. Trees.

RWY 05-23: H3000X60 (ASPH) LIRL

RWY 05: Thld dsplcd 1230'. Trees.

RWY 23: PAPI(P2L)-GA 4.0° TCH 22'. Thld dsplcd 370'. Trees.

**AIRPORT REMARKS:** Attended on req. For winter condition/snow removal Rwy 05-23 confirm prior to use; call 989-785-4724; no snow removal Rwy 13-31. Rwy 13-31 CLOSED Nov-Apr and when snow covered. Birds and deer on and invof the arpt. ACTIVATE LIRL Rwy 13-31 and Rwy 05-23 and PAPI Rwy 23-CTAF. Rwy 13-31 marked with 3' yellow cones. Rwy 13-31 LIRL ops Jun through Sep. OTS indefinitely.

**COMMUNICATIONS:** CTAF 122.9

**RADIO AIDS TO NAVIGATION:** NOTAM FILE APN.

ALPENA (L) VORTAC 108.8 APN Chan 25 N45°04.97' W83°33.42' 266° 25 NM to fld. 677/7W. HIWAS

**AU SABLE** N44°26.95' W83°23.66'. NOTAM FILE OSC.

LAKE HURON

(H) VORW/DME 116.1 ASP Chan 108 at Oscoda-Wurtsmith. 625/7W. AWOS-3.

H-11A, L-31C

VOR portion unusable 300°-360° byd 35 NM blo 2800'. DME unusable 300°-020° byd 35 NM blo 3000'.

**AUSTN** N42°07.86' W85°31.79'. NOTAM FILE AZO.

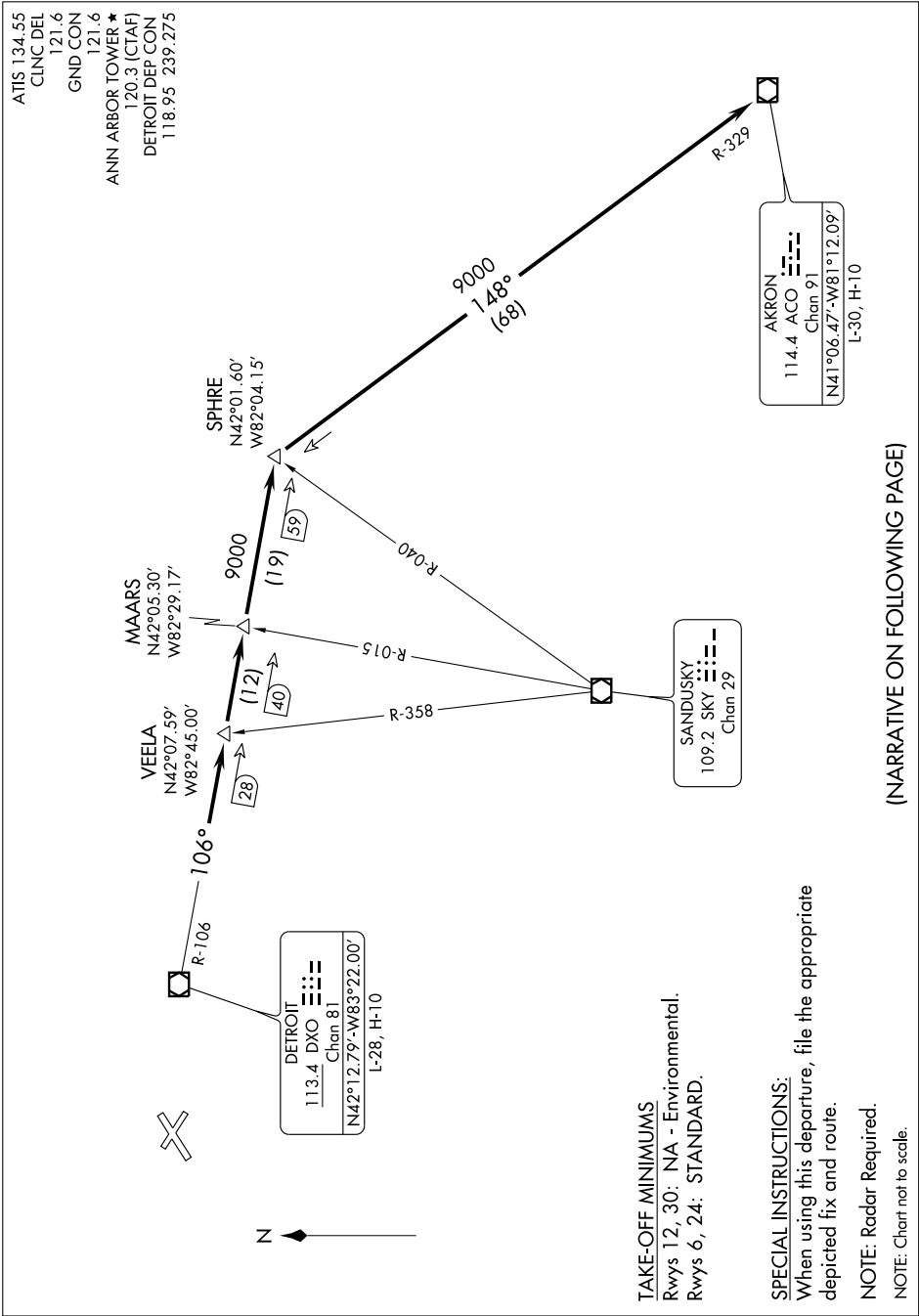
CHICAGO

NDB (LOM) 371 AZ 354° 6.3 NM to Kalamazoo Co. Unmonitored.

AKRON TWO DEPARTURE

SL-5506 (FAA)

ANN ARBOR MUNI (ARB)  
ANN ARBOR, MICHIGAN





## DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 6/24: Climb via assigned heading for radar vectors, thence. . . .

. . . .to intercept DXO VOR/DME R-106 to SPHRE INT, then via ACO R-329 to ACO VOR/DME. Maintain 3000 feet, expect clearance to filed altitude/flight level ten (10) minutes after departure.

TAKE-OFF OBSTACLES

Rwy 6: Multiple Trees beginning 442' from DER, 47' right of centerline, up to 79' AGL/899' MSL.

Building 312' from DER, 479' right of centerline, 15' AGL/838' MSL.

Multiple Trees beginning 635' from DER, 182' left of centerline, up to 59' AGL/887' MSL.

Building 99' from DER, 351' left of centerline, 22' AGL/849' MSL.

Rwy 24: Multiple Trees beginning 479' from DER, 473' left of centerline, up to 100' AGL/929' MSL.

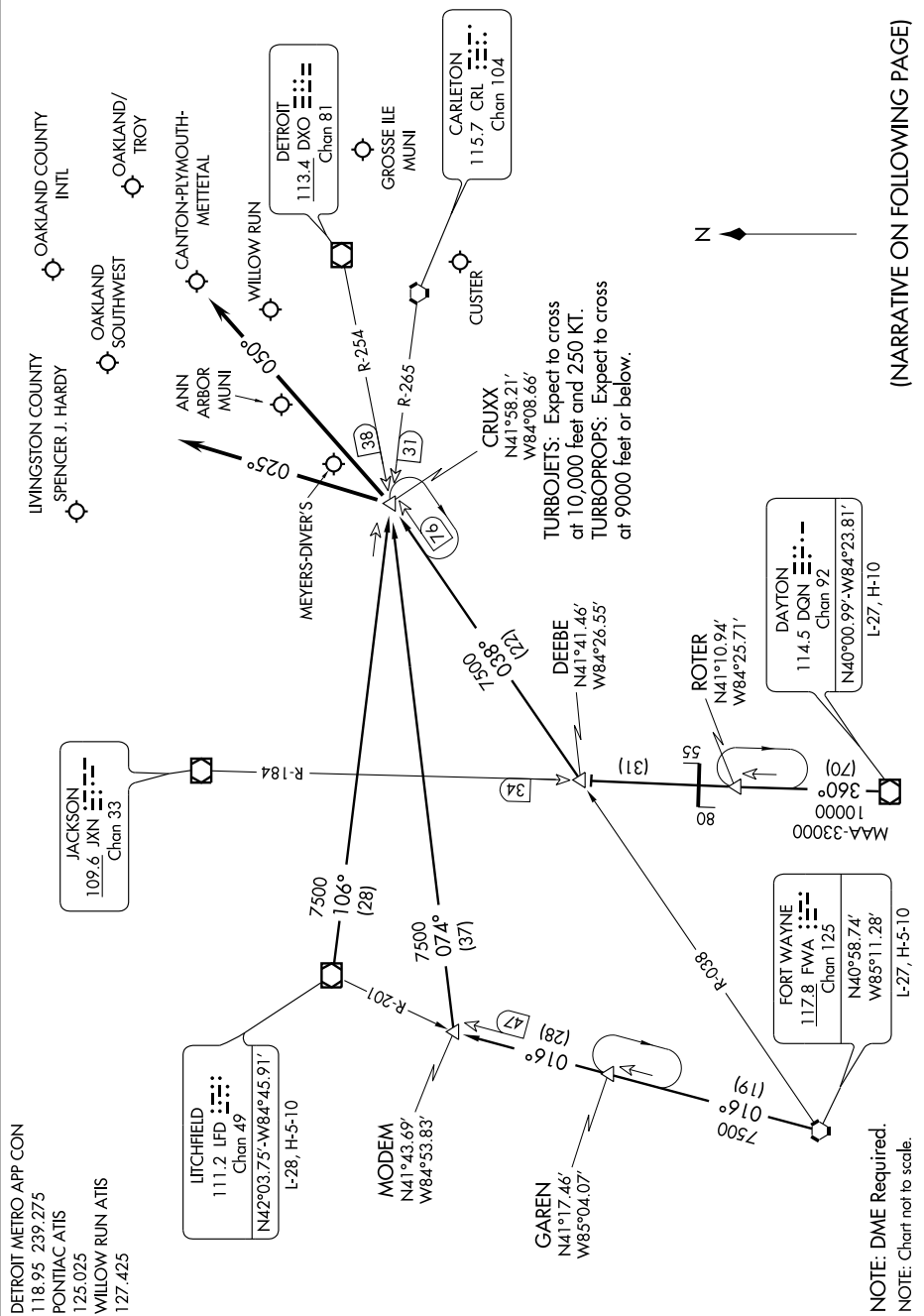
Multiple Trees beginning 462' from DER, 486' right of centerline, up to 50' AGL/885' MSL.

Terrain 138' from DER, 475' right of centerline, 0' AGL/837' MSL.

## CRUXX FOUR ARRIVAL

DETROIT, MICHIGAN

EC-1, 23 SEP 2010 to 21 OCT 2010



## CRUXX FOUR ARRIVAL

(CRUXX.CRUXX4) 10210

DETROIT, MICHIGAN

EC-1, 23 SEP 2010 to 21 OCT 2010

## CRUXX FOUR ARRIVAL (CRUXX.CRUX4)

DETROIT, MICHIGAN

## ARRIVAL DESCRIPTION

DAYTON TRANSITION (DQN.CRUX4): From over DQN VOR/DME via DQN R-360 and JXN R-184 to DEEBE INT and FWA R-038 to CRUXX INT. Thence . . . .

FORT WAYNE TRANSITION (FWA.CRUX4): From over FWA VORTAC via FWA R-016 to MODEM INT and DXO R-254 to CRUXX INT. Thence . . . .

LITCHFIELD TRANSITION (LFD.CRUX4): From over LFD VORTAC via LFD R-106 to CRUXX INT. Thence . . . .

. . . . Aircraft landing Y47, PTK, 0MI7, ØZW, ONZ, 1D2, TTF, VLL: From over CRUXX INT via 025° heading.

. . . . Aircraft landing YIP or ARB: From over CRUXX INT via 050° heading. Expect radar vector to final approach course.

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010







DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 6 and 24: Climb via assigned heading for vectors to join the assigned SID. Maintain 3000 feet, expect clearance to filed altitude/flight level ten (10) minutes after departure.

CHARDON TRANSITION (ERRTH2.CXR): From over ERRTH INT via CXR R-325 to CXR VOR/DME.

KEATING TRANSITION (ERRTH2.ETG): From over ERRTH INT via CXR R-325 to CXR VOR/DME, then via CXR R-102 and ETG R-289 to MIGET INT, then via ETG R-289 MIGET INT to ETG VORTAC.

SLATE RUN TRANSITION (ERRTH2.SLT): (DME Required) From over ERRTH INT via YQG R-101 to TRACE INT, then via ECK R-139 to DORET INT, then via SLT R-287 to SLT VORTAC.

TAKE-OFF OBSTACLES:

- Rwy 6: Multiple trees beginning 442' from DER, 47' right of centerline, up to 79' AGL/899' MSL. Building 312' from DER, 479' right of centerline, 15' AGL/838' MSL. Multiple trees beginning 635' from DER, 182' left of centerline, up to 59' AGL/887' MSL. Building 99' from DER, 351' left of centerline, 22' AGL/849' MSL.
- Rwy 24: Multiple trees beginning 479' from DER, 473' left of centerline, up to 100' AGL/929' MSL. Multiple trees beginning 462' from DER, 486' right of centerline, up to 50' AGL/885' MSL. Terrain 138' from DER, 475' right of centerline, 0' AGL/837' MSL.

# FORT WAYNE THREE DEPARTURE

SL-5506 (FAA)

ANN ARBOR MUNI (ARB)  
ANN ARBOR, MICHIGAN

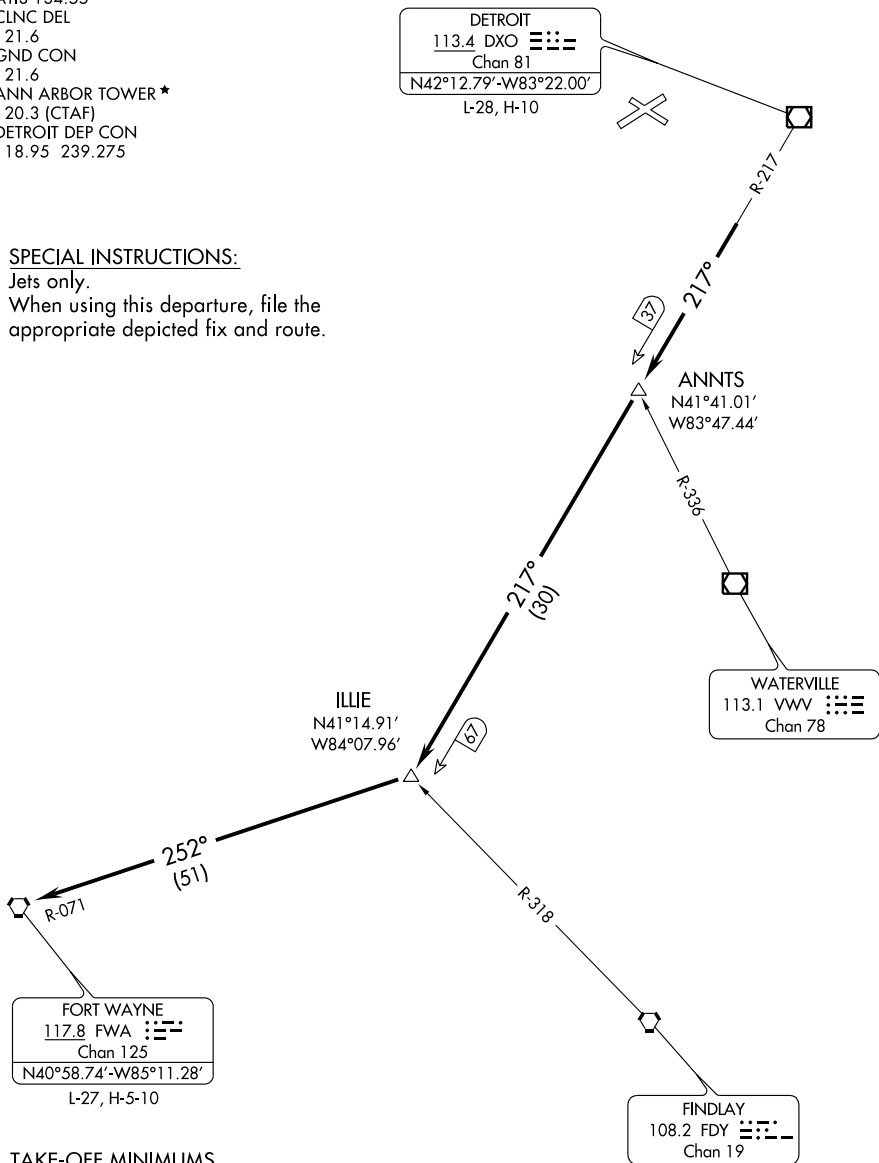
ATIS 134.55  
CLNC DEL  
121.6  
GND CON  
121.6  
ANN ARBOR TOWER ★  
120.3 (CTAF)  
DETROIT DEP CON  
118.95 239.275

DETROIT  
113.4 DXO  
Chan 81  
N42°12.79'-W83°22.00'  
L-28, H-10

## SPECIAL INSTRUCTIONS:

Jets only.

When using this departure, file the appropriate depicted fix and route.



## TAKE-OFF MINIMUMS

Rwys 6, 24: STANDARD.

Rwys 12, 30: NA - Environmental.

NOTE: RADAR Required.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

# FORT WAYNE THREE DEPARTURE



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 6/24: Climb via assigned heading for radar vectors, thence. . . .

. . . .to intercept DXO VOR/DME R-217 to ILLIE INT, then via FWA R-071 to FWA VORTAC. Maintain 3000, expect clearance to filed flight level ten (10) minutes after departure.

TAKE-OFF OBSTACLES:

- Rwy 6: Multiple trees beginning 442' from DER, 47' right of centerline, up to 79' AGL/899' MSL.  
Building 312' from DER, 479' right of centerline, 15' AGL/838 MSL.  
Multiple trees beginning 635' from DER, 182' left of centerline, up to 59' AGL/887' MSL.  
Building 99' from DER, 351' left of centerline, 22' AGL/849' MSL.
- Rwy 24: Multiple trees beginning 479' from DER, 473' left of centerline, up to 100' AGL/929' MSL.  
Multiple trees beginning 462' from DER, 486' right of centerline, up to 50' AGL/885' MSL.  
Terrain 138' from DER, 475' right of centerline, 0' AGL/837' MSL.

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010

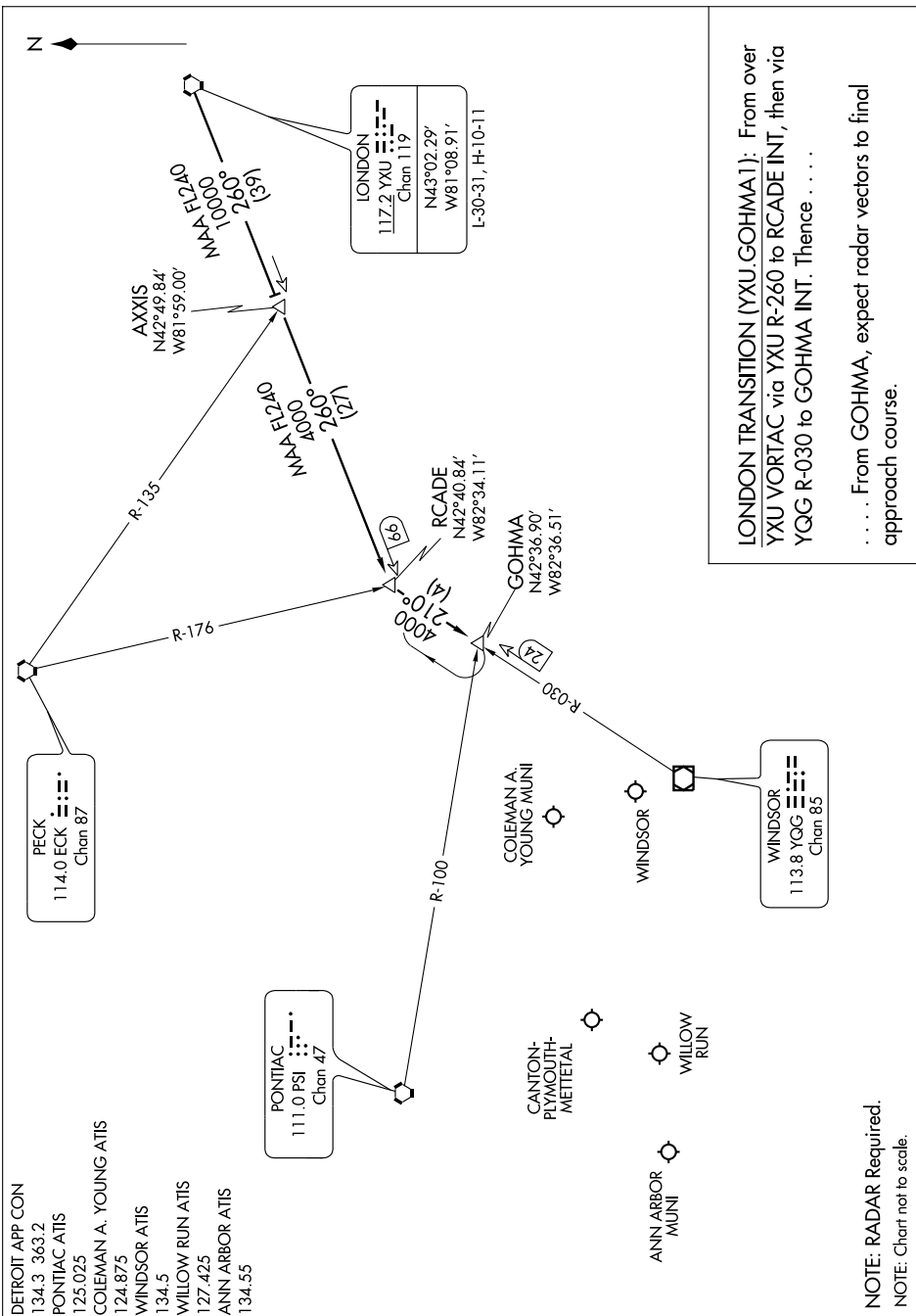
# GOHMA ONE ARRIVAL

DETROIT APP CON  
134.3 363.2  
PONTIAC ATIS  
125.025  
COLEMAN A. YOUNG ATIS  
124.875  
WINDSOR ATIS  
134.5  
WILLOW RUN ATIS  
127.425  
ANN ARBOR ATIS  
134.55

GOHMA ONE ARRIVAL  
(GOHMA.GOHMA1) 09351

ST-467 (FAA)

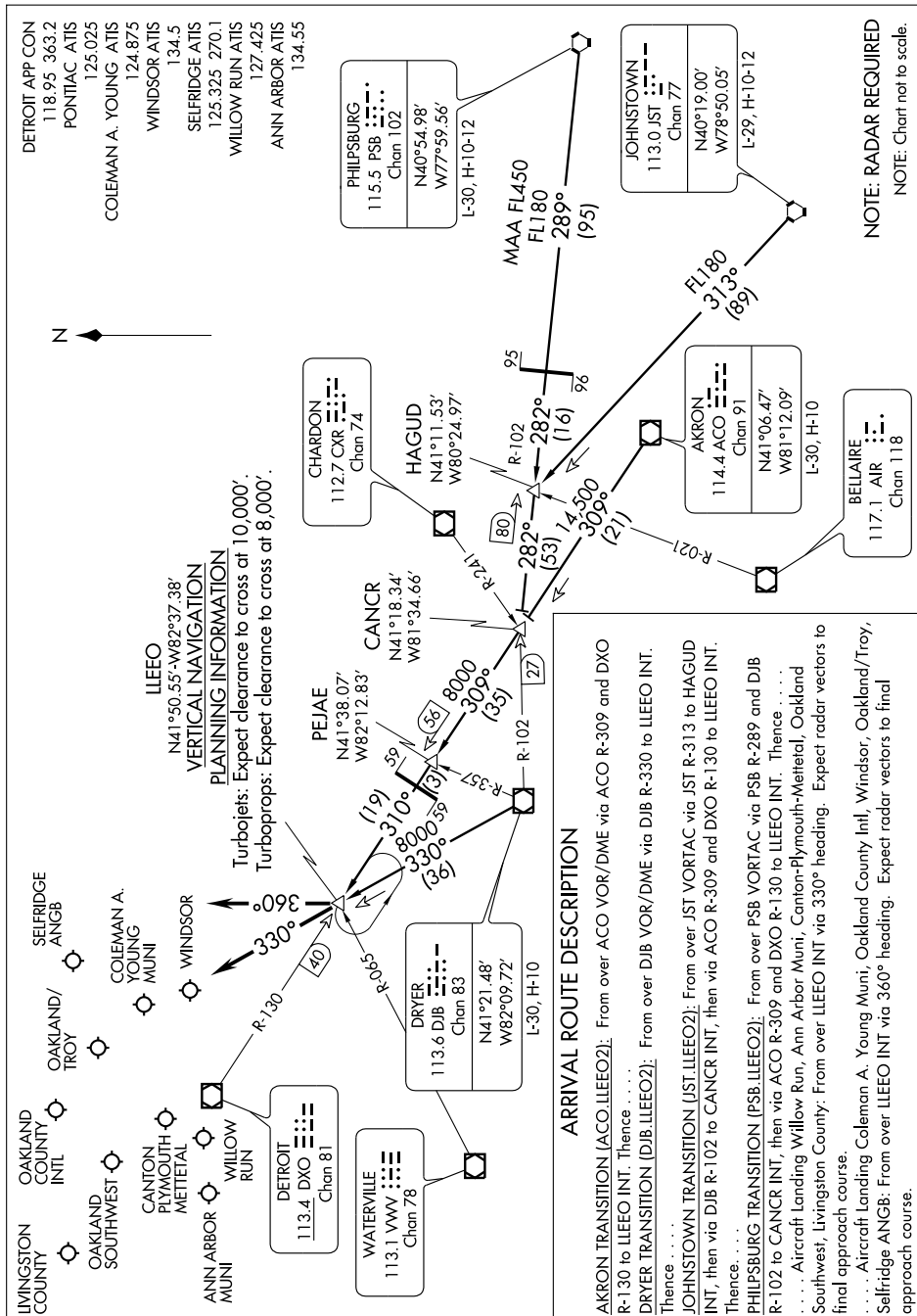
DETROIT, MICHIGAN



EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010

## LEEO TWO ARRIVAL



**EC-1, 23 SEP 2010 to 21 OCT 2010**

EC-1. 23 SEP 2010 to 21 OCT 2010

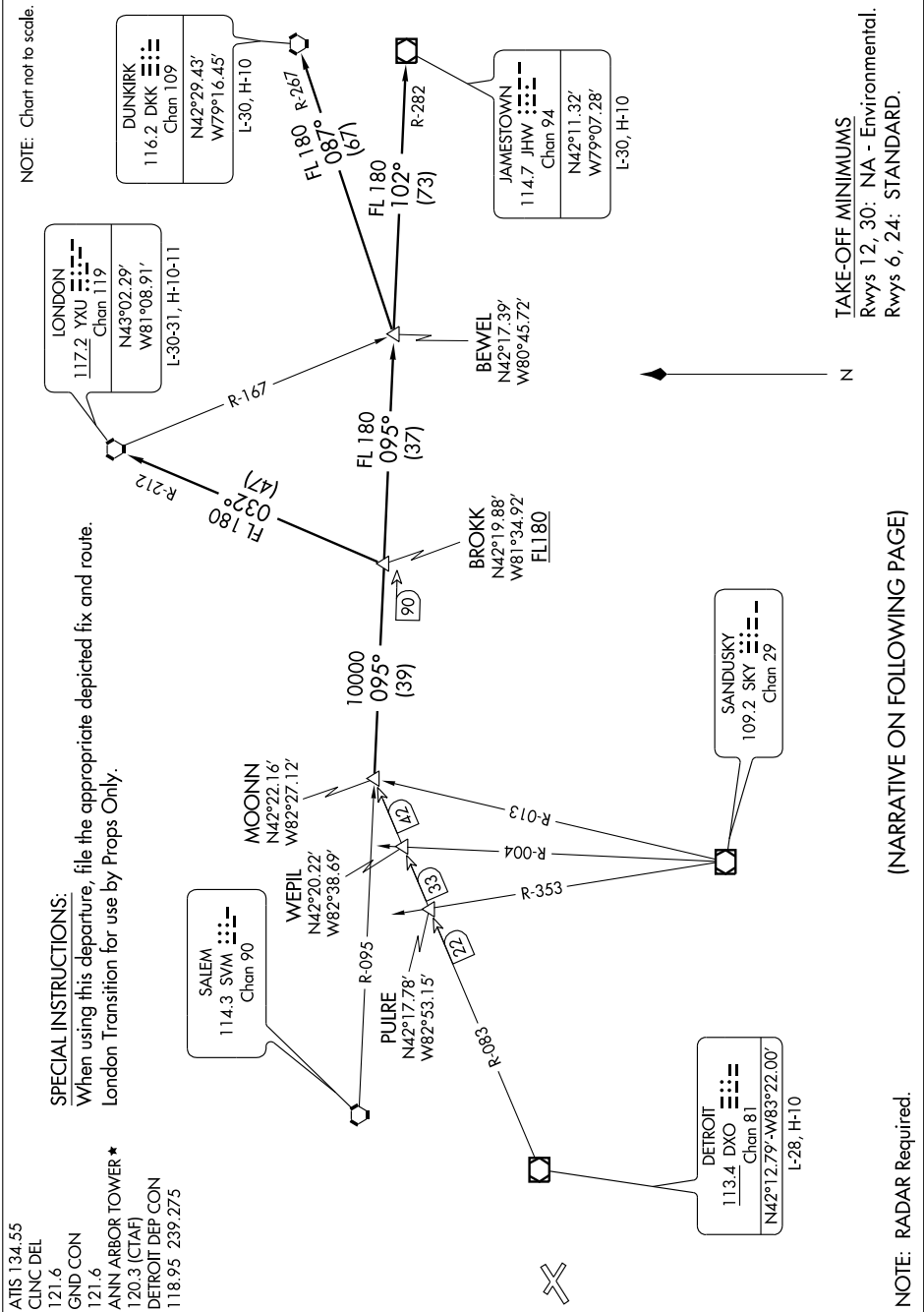
## LEEO TWO ARRIVAL

MOONN TWO DEPARTURE

SL-5506 (FAA)

ANN ARBOR MUNI (ARB)

ANN ARBOR, MICHIGAN



MOONN TWO DEPARTURE

ANN ARBOR, MICHIGAN

ANN ARBOR MUNI (ARB)



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 6/24: Climb via assigned heading for radar vectors to join the assigned SID. Maintain 3000 feet, expect clearance to filed altitude/flight level ten (10) minutes after departure.

DUNKIRK TRANSITION (MOONN2.DKK): From over MOONN INT via SVM R-095 to BROKK INT, then via SVM R-095 and JHW R-282 to BEWEL INT, then via DKK R-267 to DKK VORTAC.

JAMESTOWN TRANSITION (MOONN2.JHW): From over MOONN INT via SVM R-095 to BROKK INT, then via SVM R-095 and JHW R-282 to BEWEL INT, then via JHW R-282 to JHW VOR/DME.

LONDON TRANSITION (MOONN2.YXU): From over MOONN INT via SVM R-095 to BROKK INT, then via YXU R-212 to YXU VORTAC.

TAKE-OFF OBSTACLES

- Rwy 6: Multiple trees beginning 442' from DER, 47' right of centerline, up to 79' AGL/899' MSL. Building 312' from DER, 479' right of centerline, 15' AGL/838' MSL. Multiple trees beginning 635' from DER, 182' left of centerline, up to 59' AGL/887' MSL. Building 99' from DER, 351' left of centerline, 22' AGL/849' MSL.
- Rwy 24: Multiple trees beginning 479' from DER, 473' left of centerline, up to 100' AGL/929' MSL. Multiple trees beginning 462' from DER, 486' right of centerline, up to 50' AGL/885' MSL. Terrain 138' from DER, 475' right of centerline, 0' AGL/837' MSL.

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010

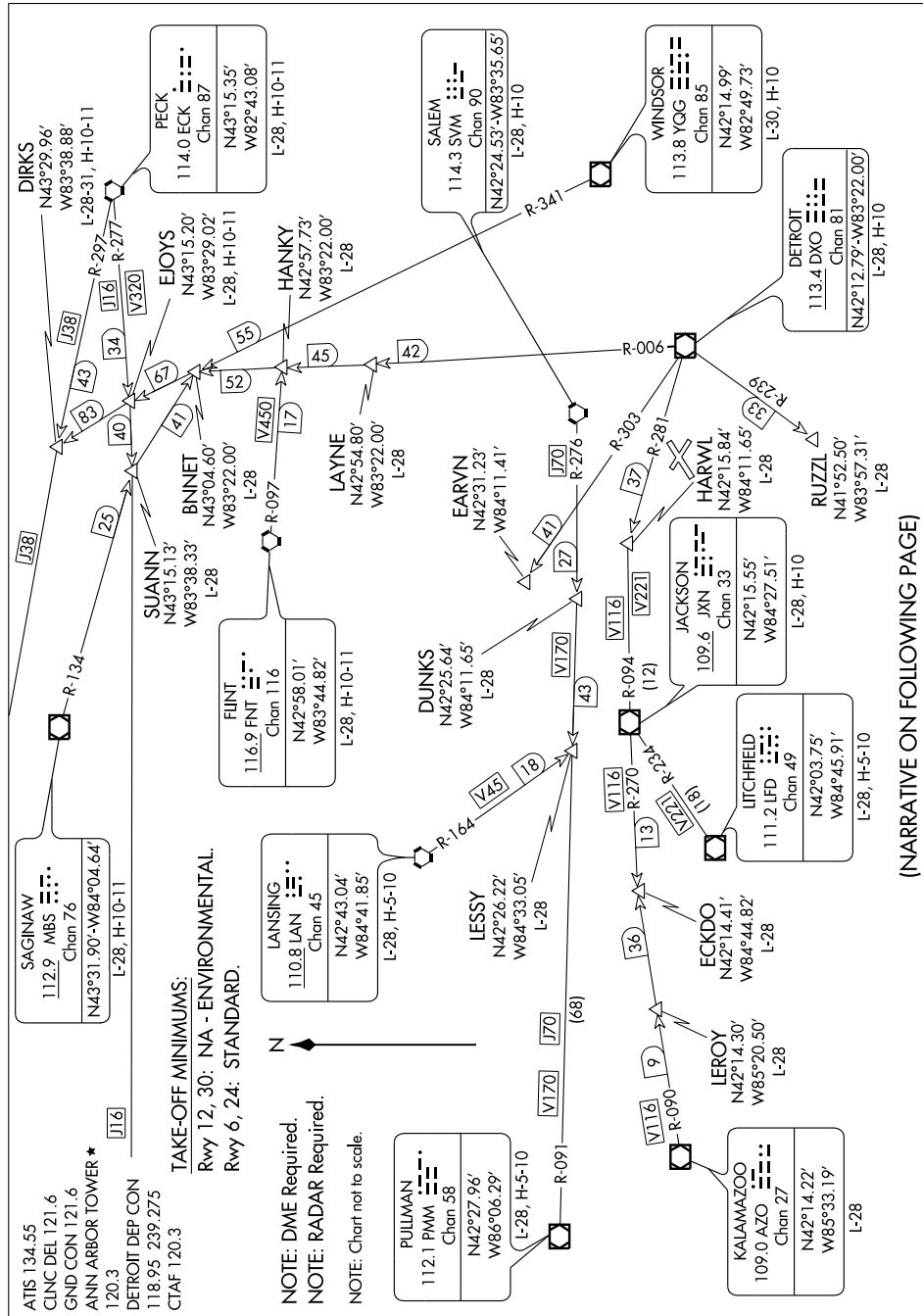
## PALACE THREE DEPARTURE

SL-5506 (FAA)

ANN ARBOR MUNI (ARB)

ANN ARBOR, MICHIGAN

EC-1, 23 SEP 2010 to 21 OCT 2010



(NARRATIVE ON FOLLOWING PAGE)

EC-1, 23 SEP 2010 to 21 OCT 2010

## PALACE THREE DEPARTURE

ANN ARBOR, MICHIGAN

ANN ARBOR MUNI (ARB)





## DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 6 AND 24: Climb via assigned heading for radar vectors to join the assigned SID. Maintain 3000 feet, expect clearance to filed altitude/flight level ten (10) minutes after departure.

SPECIAL INSTRUCTIONS:

When using this departure, file the appropriate depicted departure fix and route. Aircraft landing/overflying Lansing (LAN) or overflying Flint (FNT) at 10,000 feet or below, file via EARNV. Aircraft landing Flint (FNT) at 10,000 feet or below, file via LAYNE. Aircraft landing/overflying Toledo (TOL) at 10,000 feet or below, file via RUZZL. Aircraft over HARWL must file FL220 and below.

TAKE-OFF OBSTACLES:

- Rwy 6: Multiple trees beginning 442' from DER, 47' right of centerline, up to 79' AGL/899' MSL. Building 312' from DER, 479' right of centerline, 15' AGL/838' MSL. Multiple trees beginning 635' from DER, 182' left of centerline, up to 59' AGL/887' MSL. Building 99' from DER, 351' left of centerline, 22' AGL/849' MSL.
- Rwy 24: Multiple trees beginning 479' from DER, 475' left of centerline, up to 100' AGL/929' MSL. Multiple trees beginning 462' from DER, 486' right of centerline, up to 50' AGL/885' MSL. Terrain 138' from DER, 475' right of centerline, 0' AGL/837' MSL.

(RID4.RID) 09015

# RICHMOND FOUR DEPARTURE

SL-5506 (FAA)

ANN ARBOR MUNI (ARB)

ANN ARBOR, MICHIGAN

ATIS 134.55  
CLNC DEL  
121.6  
GND CON  
121.6  
ANN ARBOR TOWER ★  
120.3 (CTAF)  
DETROIT DEP CON  
118.95 239.275



DETROIT  
113.4 DXO   
Chan 81  
N42°12.79'-W83°22.00'  
L-28, H-10

CAVVS  
N41°41.04'  
W83°34.14'  
L-28

SANDUSKY  
109.2 SKY   
Chan 29

WATERVILLE  
113.1 VWV   
Chan 78  
N41°27.09'  
W83°38.32'  
L-28, H-10

## SPECIAL INSTRUCTIONS:

Jets only.

When using this departure, file the appropriate depicted fix and route.

## TAKE-OFF MINIMUMS:

Rwy 12, 30: NA - Environmental.

Rwy 6, 24: STANDARD.

NOTE: RADAR Required.

NOTE: Chart not to scale.



RICHMOND  
110.6 RID   
Chan 43  
N39°45.30' - W84°50.33'  
L-27, H-10

(NARRATIVE ON FOLLOWING PAGE)

# RICHMOND FOUR DEPARTURE

(RID4.RID) 09015

ANN ARBOR, MICHIGAN

ANN ARBOR MUNI (ARB)

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 6/24: Climb via assigned heading for radar vectors, thence. . . .

. . . . To intercept DXO VOR/DME R-202 to CAVVS INT/DXO 33 DME, then via VWV R-015 to VWV VOR/DME. Then right turn via VWV R-211 and RID R-031 to RID VORTAC. Maintain 3,000 feet, expect clearance to filed altitude/flight level ten (10) minutes after departure.

TAKE-OFF OBSTACLES:

Rwy 6: Multiple trees beginning 442' from DER, 47' right of centerline, up to 79' AGL/899' MSL.  
Building 312' from DER, 479' right of centerline, 15' AGL/838' MSL.  
Multiple trees beginning 635' from DER, 182' left of centerline, up to 59' AGL/887' MSL.  
Building 99' from DER, 351' left of centerline, 22' AGL/849' MSL.

Rwy 24: Multiple trees beginning 479' from DER, 473' left of centerline, up to 100' AGL/929' MSL.  
Multiple trees beginning 462' from DER, 486' right of centerline, up to 50' AGL/885' MSL.  
Terrain 138' from DER, 475' right of centerline, 0' AGL/837' MSL.

WAAS CH <b>77601</b> <b>W06A</b>	APP CRS <b>059°</b>	Rwy Idg <b>3505</b> TDZE <b>831</b> Apt Elev <b>839</b>
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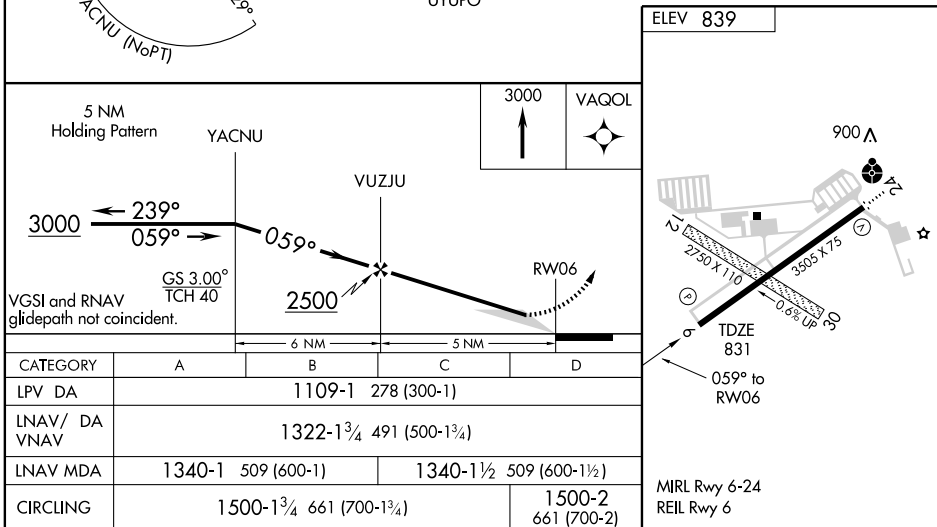
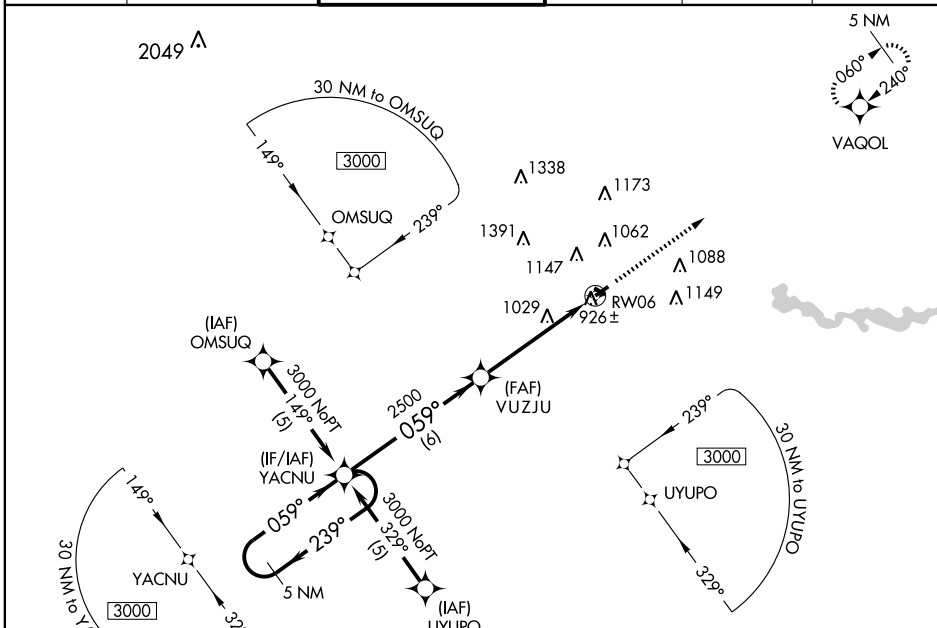
## RNAV (GPS) RWY 6

ANN ARBOR MUNI (ARB)

- T** DME/DME RNP-0.3 NA. If local altimeter setting not received, use Willow Run altimeter setting and increase all DAs/MDAs 40 feet. Baro-VNAV NA when using Willow Run altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (117°F).

MISSED APPROACH: Climb to 3000  
direct VAQOL and hold.

ATIS 134.55	DETROIT APP CON 118.95 363.2	ANN ARBOR TOWER ★ 120.3 (CTAF) 0	GND CON 121.6	CLNC DEL 121.6	UNICOM 123.0
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ANN ARBOR, MICHIGAN

Amdt 1 07354

42°13'N - 83°45'W

ANN ARBOR MUNI (ARB)

## RNAV (GPS) RWY 6

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1. 23 SEP 2010 to 21 OCT 2010

WAAS CH <b>81901</b> <b>W24A</b>	APP CRS <b>240°</b>	Rwy Idg <b>3505</b> TDZE <b>831</b> Apt Elev <b>839</b>
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## RNAV (GPS) RWY 24

ANN ARBOR MUNI (ARB)

**▼** **▲** DME/DME RNP-0.3 NA. If local altimeter setting not received, use Willow Run altimeter setting and increase all DAS/MDAs 40 feet. Baro-VNAV NA when using Willow Run altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (117°F). Inoperative table does not apply. Visibility reduction by helicopters NA.

ODALS



**MISSED APPROACH:** Climb to 3000 direct YACNLL and hold.

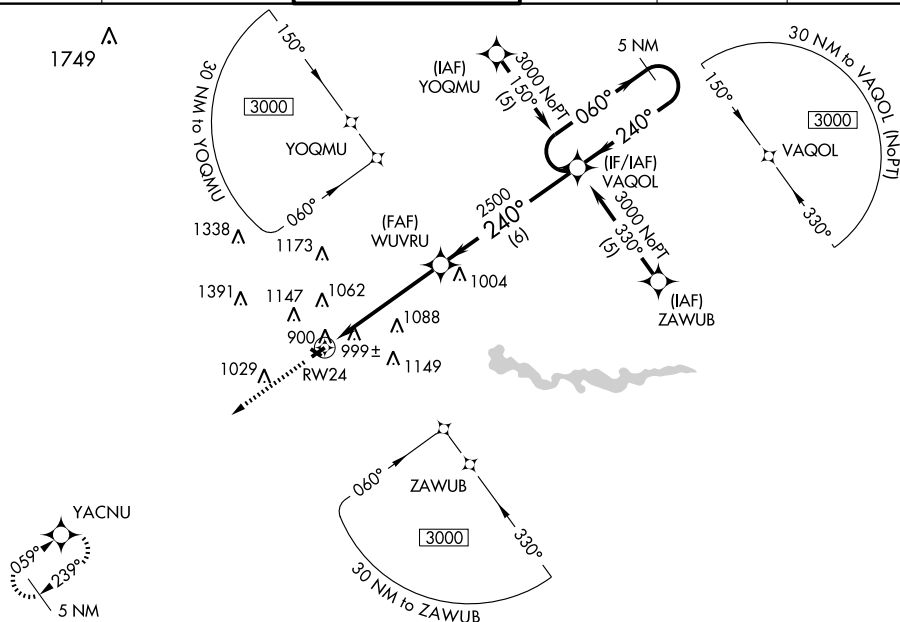
ATIS  
134.55

DETROIT APP CON  
118.95 363.2

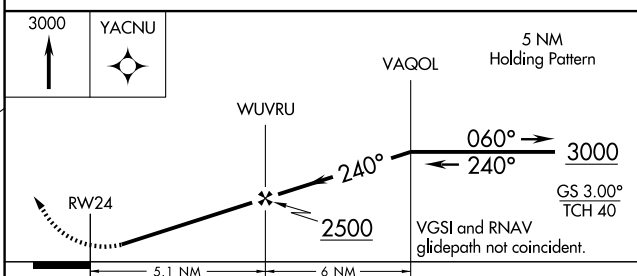
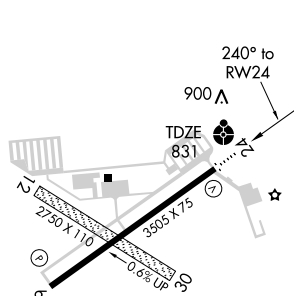
ANN ARBOR TOWER ★  
120.3 (CTAF) L

GND CON  
**121.6**

## CLNC DEL 121.6

UNICOM  
123.0

ELEV 839



CATEGORY	A	B	C	D
LPV DA	1129-1 298 (300-1)			
LNAV/ DA VNAV	1340-1 <sup>3</sup> / <sub>4</sub> 509 (600-1 <sup>3</sup> / <sub>4</sub> )			
LNAV MDA	1300-1 469 (500-1)		1300-1 <sup>1</sup> / <sub>4</sub> 469 (500-1 <sup>1</sup> / <sub>4</sub> )	1300-1 <sup>1</sup> / <sub>2</sub> 469 (500-1 <sup>1</sup> / <sub>2</sub> )
CIRCLING	1500-1 <sup>3</sup> / <sub>4</sub> 661 (700-1 <sup>3</sup> / <sub>4</sub> )			1500-2 661 (700-2)

ANN ARBOR, MICHIGAN

Amdt 1 07354

ANN ARBOR MUNI (ARB)

42°13'N - 83°45'W

RNAV (GPS) RWY 24

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1. 23 SEP 2010 to 21 OCT 2010

## ROSEWOOD TWO DEPARTURE

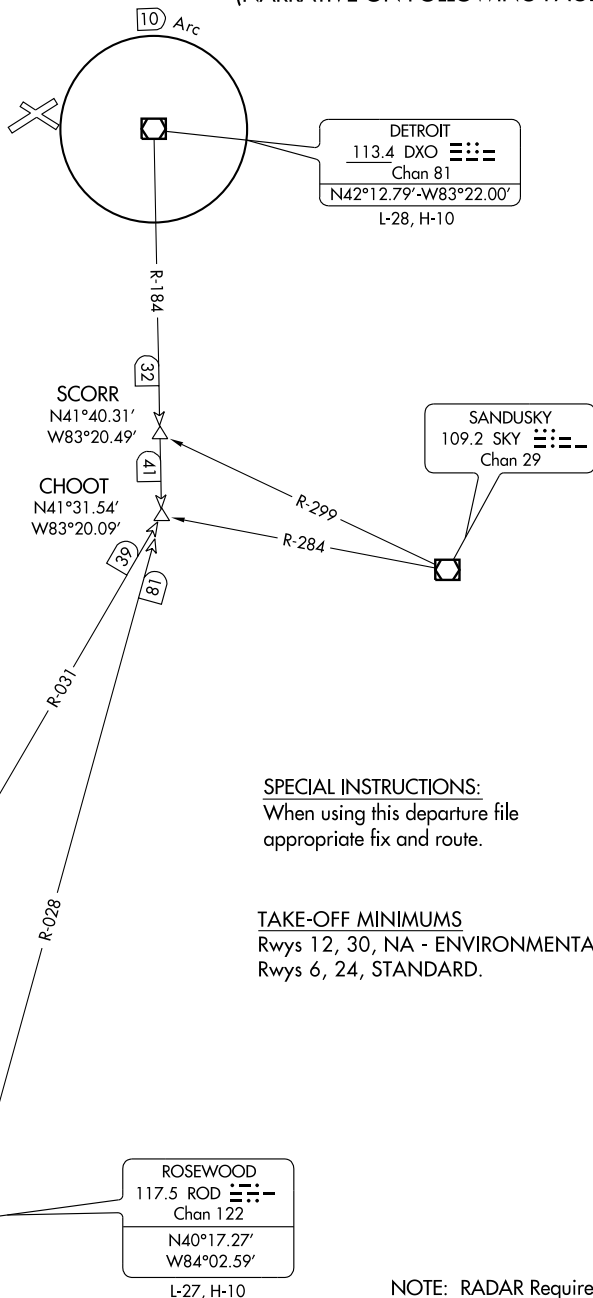
SL-5506 (FAA)

ANN ARBOR MUNI (ARB)

ANN ARBOR, MICHIGAN

ATIS 134.55  
CLNC DEL  
121.6  
GND CON  
121.6  
ANN ARBOR TOWER ★  
120.3 (CTAF)  
DETROIT DEP CON  
118.95 239.275

(NARRATIVE ON FOLLOWING PAGE)



NOTE: Chart not to scale.

SPECIAL INSTRUCTIONS:  
When using this departure file  
appropriate fix and route.

TAKE-OFF MINIMUMS  
Rwys 12, 30, NA - ENVIRONMENTAL.  
Rwys 6, 24, STANDARD.

## ROSEWOOD TWO DEPARTURE

(ROD2.ROD) 07354

ANN ARBOR, MICHIGAN

ANN ARBOR MUNI (ARB)



## DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 6/24: Climb via assigned heading for radar vectors to join the assigned SID. Maintain 3000 feet, expect clearance to filed altitude / flight level ten (10) minutes after departure.

TAKE-OFF OBSTACLES

- Rwy 6: Multiple trees beginning 442' from DER, 47' right of centerline, up to 79' AGL/899' MSL. Building 312' from DER, 479' right of centerline, 15' AGL/838' MSL. Multiple trees beginning 635' from DER, 182' left of centerline, up to 59' AGL/887' MSL. Building 99' from DER, 351' left of centerline, 22' AGL/849' MSL.
- Rwy 24: Multiple trees beginning 479' from DER, 473' left of centerline, up to 100' AGL/929' MSL. Multiple trees beginning 462' from DER, 486' right of centerline, up to 50' AGL/885' MSL. Terrain 138' from DER, 475' right of centerline, 0' AGL/837' MSL.

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010

## SPRTN THREE ARRIVAL

DETROIT, MICHIGAN

DETROIT APP CON

127.5 239.275

WILLOW RUN ATIS 127.425

PONTIAC ATIS 125.025

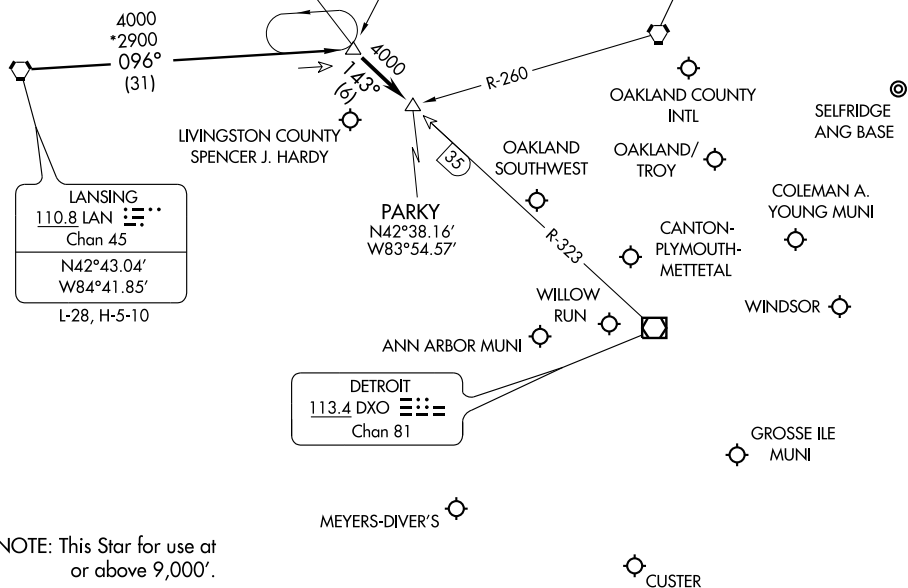
COLEMAN A. YOUNG ATIS 124.875

WINDSOR ATIS 134.5

SELFRIAGE ATIS 125.325 270.1

## SPRTN

N42°42.52'-W84°00.23'

VERTICAL NAVIGATION  
PLANNING INFORMATIONTURBOJETS/TURBOPROPS:  
Expect clearance to cross at  
9000'.

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010

**LANSING TRANSITION (LAN.SPRTN3):** From over LAN VORTAC via LAN R-096 to SPRTN INT. Thence . . . .

. . . . Aircraft landing: DET, PTK, VLL, D98, MTC, ARB, YIP, ONZ, 1D2, TTF, Y47, 36MI, OZW, 3TE, YQG: From over SPRTN INT via DXO R-323 to PARKY INT. Thence . . . .

. . . . Expect radar vectors to final approach course.

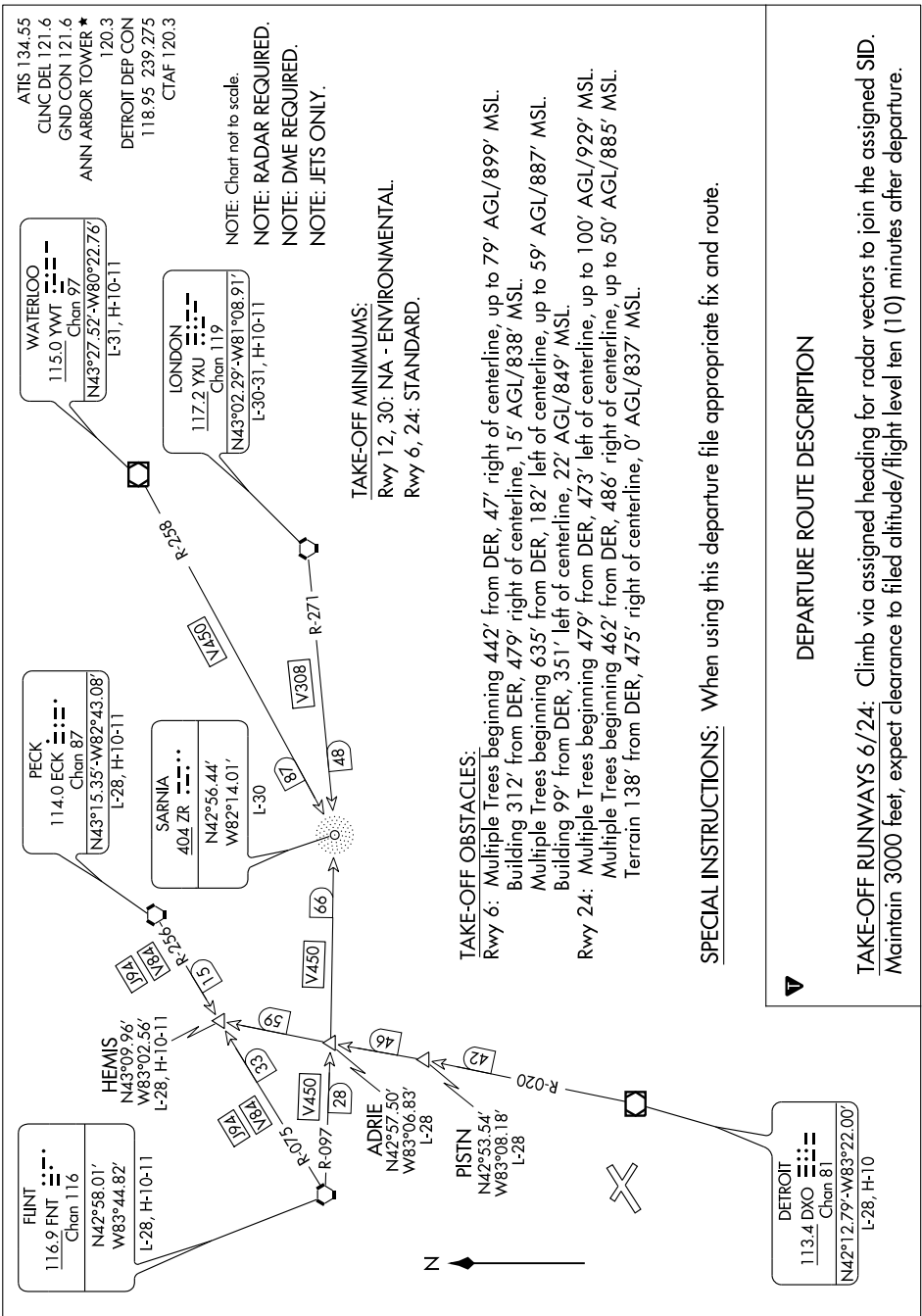
## SPRTN THREE ARRIVAL

DETROIT, MICHIGAN

(SPRTN.SPRTN3) 10210



EC-1, 23 SEP 2010 to 21 OCT 2010



EC-1, 23 SEP 2010 to 21 OCT 2010

VORTAC SVM <b>114.3</b> Chan <b>90</b>	APP CRS <b>035°</b>	Rwy Idg TDZE Apt Elev <b>830</b> <b>839</b>	<b>3505</b> <b>830</b> <b>839</b>
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# VOR RWY 6

ANN ARBOR MUNI (ARB)

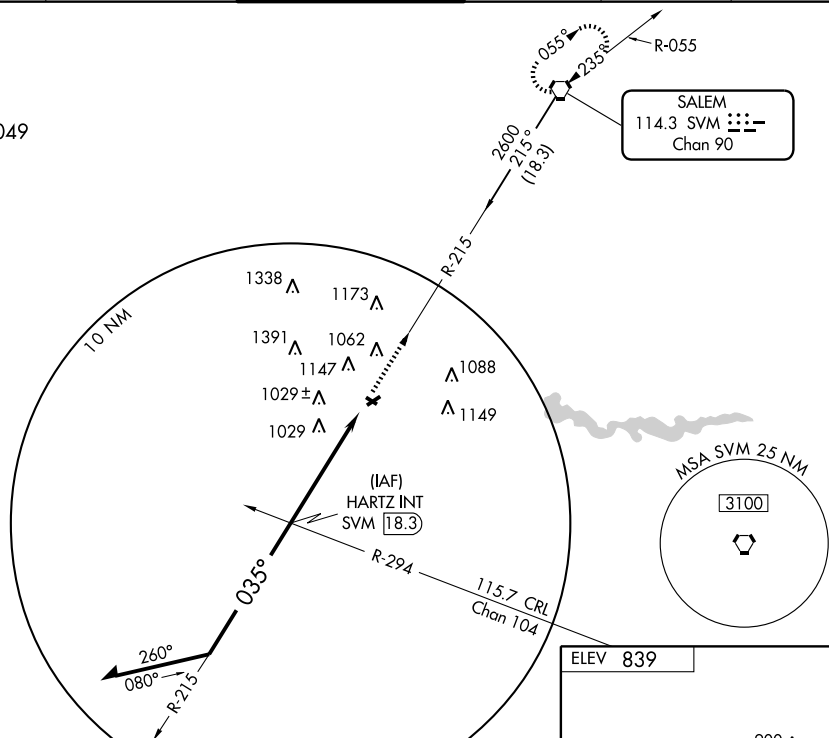


When control tower closed, use Detroit Willow Run altimeter setting.

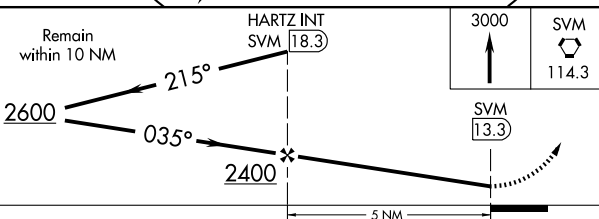
MISSED APPROACH: Climb to 3000  
direct SVM VORTAC and hold.

ATIS <b>134.55</b>	DETROIT APP CON <b>118.95 363.2</b>	ANN ARBOR TOWER ★ <b>120.3</b> (CTAF) <b>0</b>	GND CON <b>121.6</b>	CLNC DEL <b>121.6</b>	UNICOM <b>123.0</b>
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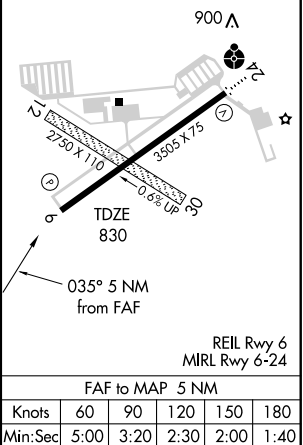
△ 2049



ELEV 839



CATEGORY	A	B	C	D
S-6	1320-1	490 (500-1)	1320-1¼ 490 (500-1¼)	1320-1½ 490 (500-1½)
CIRCLING	1500-1	661 (700-1)	1500-1¾ 661 (700-1¾)	1500-2 661 (700-2)
WILLOW RUN ALTIMETER SETTING MINIMUMS				
S-6	1340-1	510 (600-1)	1340-1½	510 (600-1½)
CIRCLING	1520-1	681 (700-1)	1520-2 681 (700-2)	1520-2¼ 681 (700-2¼)



FAF to MAP 5 NM					
Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40

VORTAC SVM <b>114.3</b> Chan <b>90</b>	APP CRS <b>213°</b>	Rwy Idg TDZE Apt Elev	<b>3505</b> <b>830</b> <b>839</b>
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# VOR RWY 24

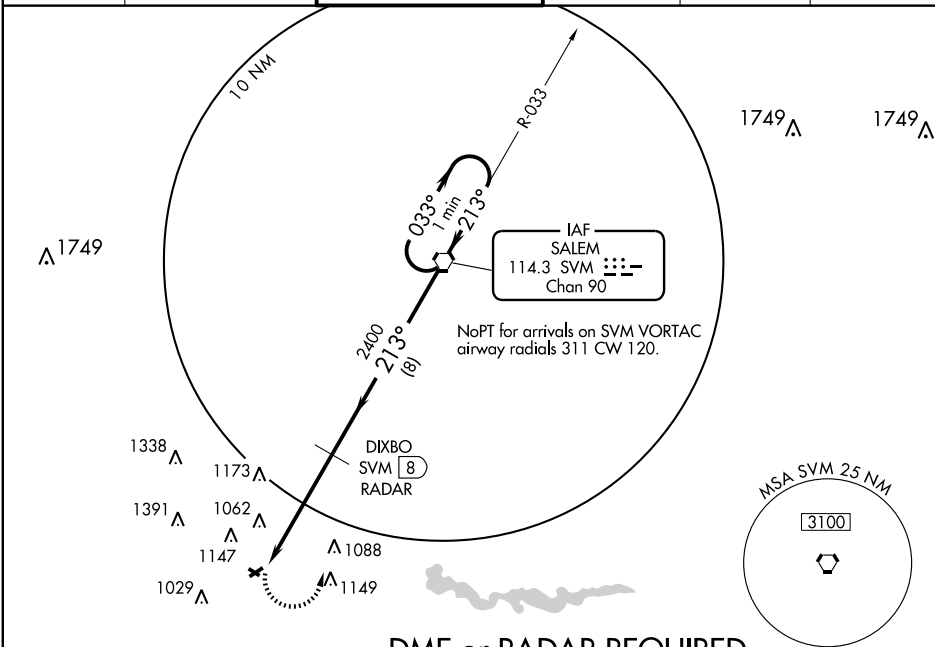
ANN ARBOR MUNI (ARB)

**▼**  
**▲** Inoperative table does not apply.  
When control tower closed, use  
Detroit Willow Run altimeter setting.

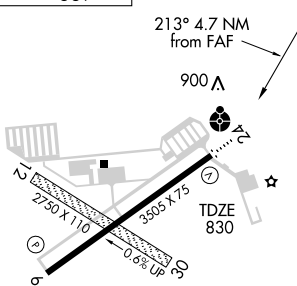


MISSED APPROACH: Climbing left turn  
to 3000 direct SVM VORTAC and hold.

ATIS <b>134.55</b>	DETROIT APP CON <b>118.95 363.2</b>	ANN ARBOR TOWER ★ <b>120.3</b> (CTAF) <b>0</b>	GND CON <b>121.6</b>	CLNC DEL <b>121.6</b>	UNICOM <b>123.0</b>
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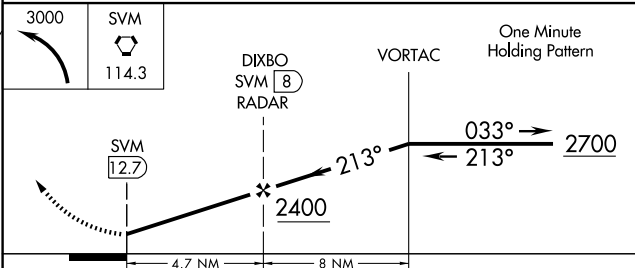
ELEV 839



MIRL Rwy 6-24  
REIL Rwy 6

FAF to MAP 4.7 NM					
Knots	60	90	120	150	180
Min:Sec	4:42	3:08	2:21	1:53	1:34

## DME or RADAR REQUIRED



CATEGORY	A	B	C	D
S-24	1460-1 630 (700-1)		1460-1¾ 630 (700-1¾)	1460-2 630 (700-2)
CIRCLING	1500-1 661 (700-1)		1500-1¾ 661 (700-1¾)	1500-2 661 (700-2)
WILLOW RUN ALTIMETER SETTING MINIMUMS				
S-24	1480-1 650 (700-1)		1480-1¾ 650 (700-1¾)	1480-2 650 (700-2)
CIRCLING	1520-1 681 (700-1)		1520-2 681 (700-2)	1520-2¼ 681 (700-2¼)

**AVOCA** (39G) 2 SE UTC-5(-4DT) N43°01.80' W82°40.16'

DETROIT

726 NOTAM FILE LAN

**RWY 09-27:** 2105X100 (TURF)

**RWY 09:** Thld dsplcd 267'. Road. Rgt tfc. **RWY 27:** Trees.

**AIRPORT REMARKS:** Attended irregularly. Ultralight ops at arpt. Rwy 09-27 and Rwy 09 dsplcd thld marked with yellow cones.

**COMMUNICATIONS:** CTAF 122.9

**TACKABERRY** (07D) 2 W UTC-5(-4DT) N43°03.87' W82°43.43'

DETROIT

764 NOTAM FILE LAN

**RWY 18-36:** 2244X65 (TURF)

**RWY 18:** Brush. **RWY 36:** Thld dsplcd 1000'. Trees.

**AIRPORT REMARKS:** Attended irregularly. Rwy 36 has 75' radio twr 200' from thld 130' left. Rwy 36 dsplcd thlds marked with 3 tires each side; Rwy 18-36 marked with tires. Rwy 18-36 NSTD LIRL; non-frangible mounting; variable spacing and NSTD lens. Lgts not for public use.

**COMMUNICATIONS:** CTAF 122.9

**BAD AXE** N43°47.02' W82°58.99'. NOTAM FILE BAX.

DETROIT

(T) **VORW/DME** 108.2 BAX Chan 19 at Huron Co Mem. 766/5W. **AWOS-3.**

L-28J, 31C

**RCO** 122.65 (LANSING RADIO)

## BAD AXE

**HURON CO MEM** (BAX) 1 S UTC-5(-4DT) N43°46.81' W82°59.13'

DETROIT

763 B **FUEL** 100LL, JET A NOTAM FILE BAX

H-11A, L-28J, 31C

**RWY 17-35:** H5009X75 (ASPH) MIRL

IAP

**RWY 17:** REIL. PAPI(P4L). Trees.

**RWY 35:** REIL. PAPI(P4L). Trees.

**RWY 04-22:** H3495X75 (ASPH) S-16 MIRL (NSTD)

**RWY 04:** Thld dsplcd 300'. Railroad. **RWY 22:** Trees.

**AIRPORT REMARKS:** Attended 1330-2130Z±. Arpt unattended major holidays and Easter. Birds on and infov arpt. Rwy 04-22 has numerous cracks. Twy A CLOSED winter months. MIRL Rwy 04-22 and MIRL Rwy 17-35 opr dusk-0230Z±; to increase ints and after 0230Z± **ACTIVATE—CTAF. ACTIVATE PAPI and REIL** Rwy 17 and Rwy 35—CTAF. Rwy 04-22 NSTD MIRL; lgts last 2000' not split amber/white lens.

**WEATHER DATA SOURCES:** **AWOS-3** 108.2 BAX (989) 269-4137.

**COMMUNICATIONS:** CTAF/UNICOM 122.975

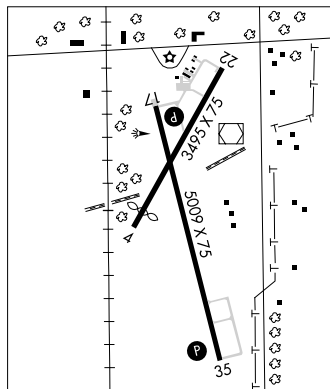
**BAD AXE RCO** 122.65 (LANSING RADIO)

® **CLEVELAND CENTER APP/DEP CON** 127.7

**RADIO AIDS TO NAVIGATION:** NOTAM FILE BAX.

**BAD AXE (T) VORW/DME** 108.2 BAX Chan 19 N43°47.02'

W82°58.99' at fld. 766/5W. **AWOS-3.**



APP CRS **033°**  
Rwy Idg **3195**  
TDZE **763**  
Apt Elev **763**

# RNAV (GPS) RWY 4

BAD AXE / HURON COUNTY MEMORIAL (BAX)

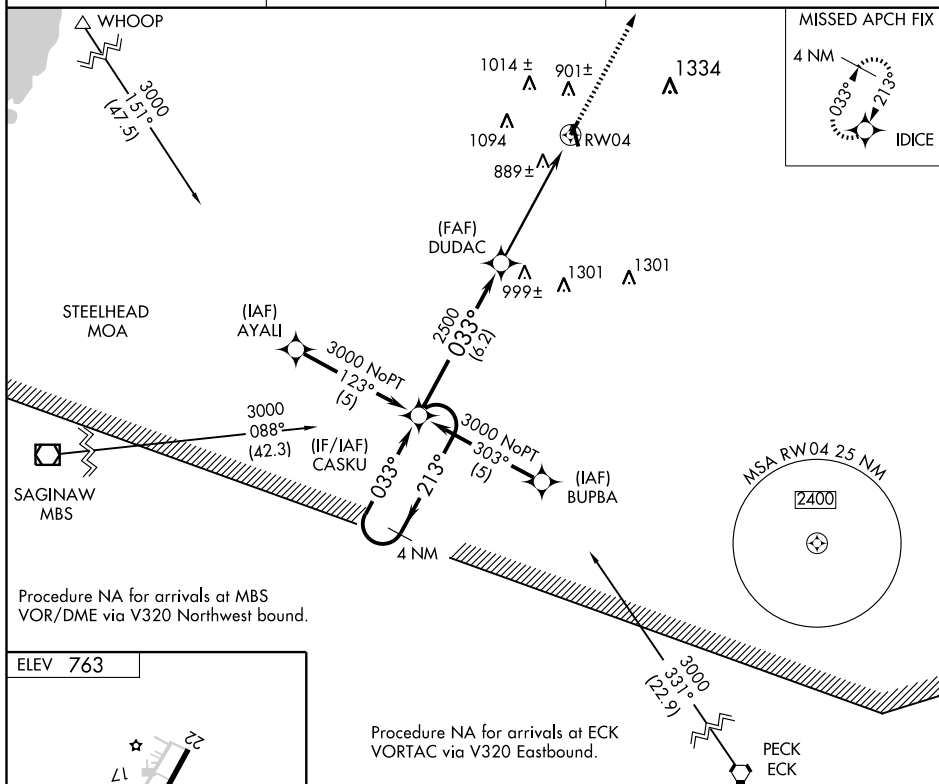
**▼** DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.  
**▲** When local altimeter setting not received, use MBS INTL altimeter setting and increase all MDAs 140 feet, and Cat C visibility ½ mile.

MISSED APPROACH: Climb to 3000 direct IDICE and hold.

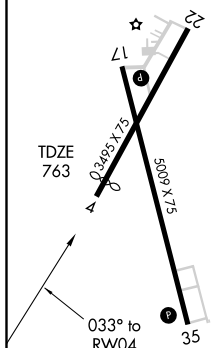
AWOS-3  
**108.2**

CLEVELAND CENTER  
**127.7 307.8**

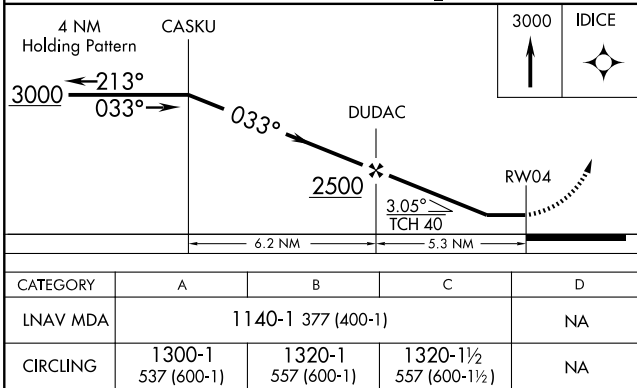
UNICOM  
**122.975 (CTAF) 0**



ELEV **763**



REIL Rwy 17 and 35 **0**  
MIRL Rwy 4-22 and 17-35 **0**



WAAS  
CH **69205**  
**W17A**

APP CRS  
**170°**

Rwy Idg  
TDZE **763**  
Apt Elev **763**

**RNAV (GPS) RWY 17**

BAD AXE / HURON COUNTY MEMORIAL (BAX)

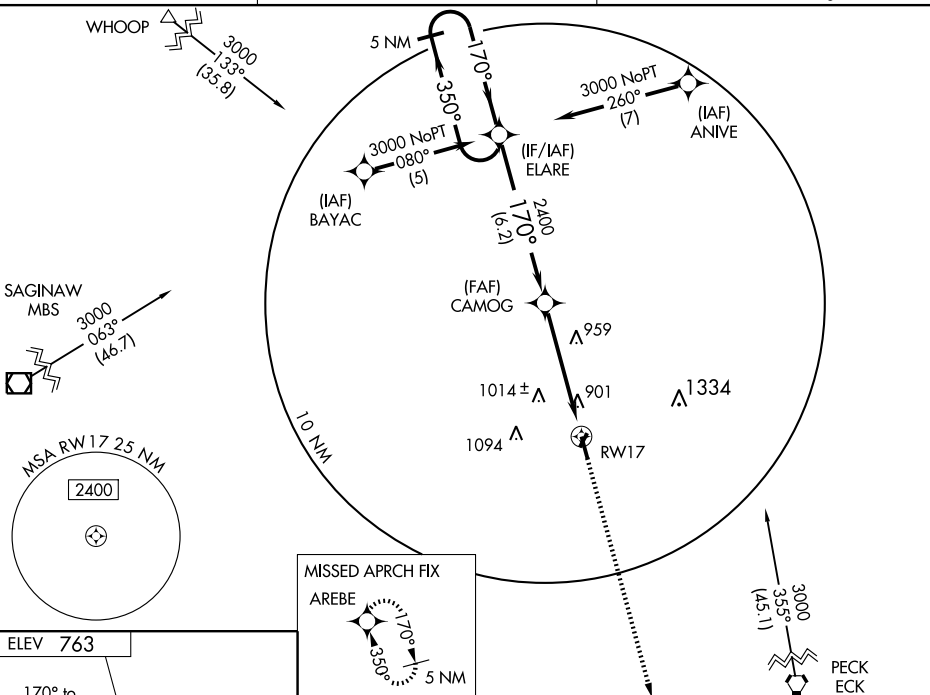
**T** When VGSI inop, procedure NA at night. DME/DME RNP-0.3 NA. Baro-VNAV NA when using Saginaw Intl altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1.6°C (4°F) or above 54°C (130°F). Visibility reduction by helicopters NA. If local altimeter setting not received, use Saginaw Intl altimeter setting and increase all DAs 129 feet and all MDAs 140 feet.

**MISSED APPROACH:** Climb to 3000 direct AREBE and hold.

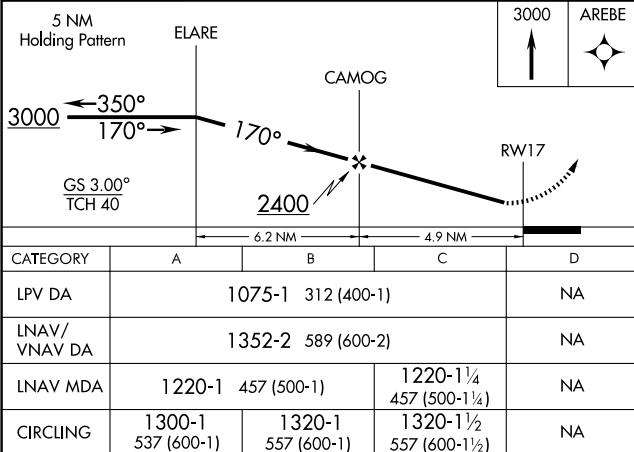
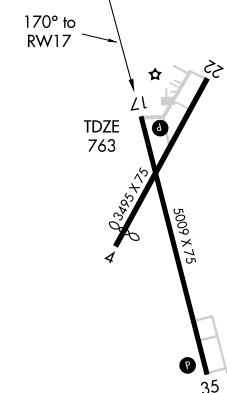
AWOS-3  
**108.2**

CLEVELAND CENTER  
**127.7 307.8**

UNICOM  
**122.975 (CTAF) 0**



ELEV **763**



REIL Rwy 17 and 35 **0**  
MIRL Rwy 4-22 and 17-35 **0**

APP CRS **213°**  
 Rwy Idg **3495**  
 TDZE **763**  
 Apt Elev **763**

# RNAV (GPS) RWY 22

BAD AXE / HURON COUNTY MEMORIAL (B.A.X.)

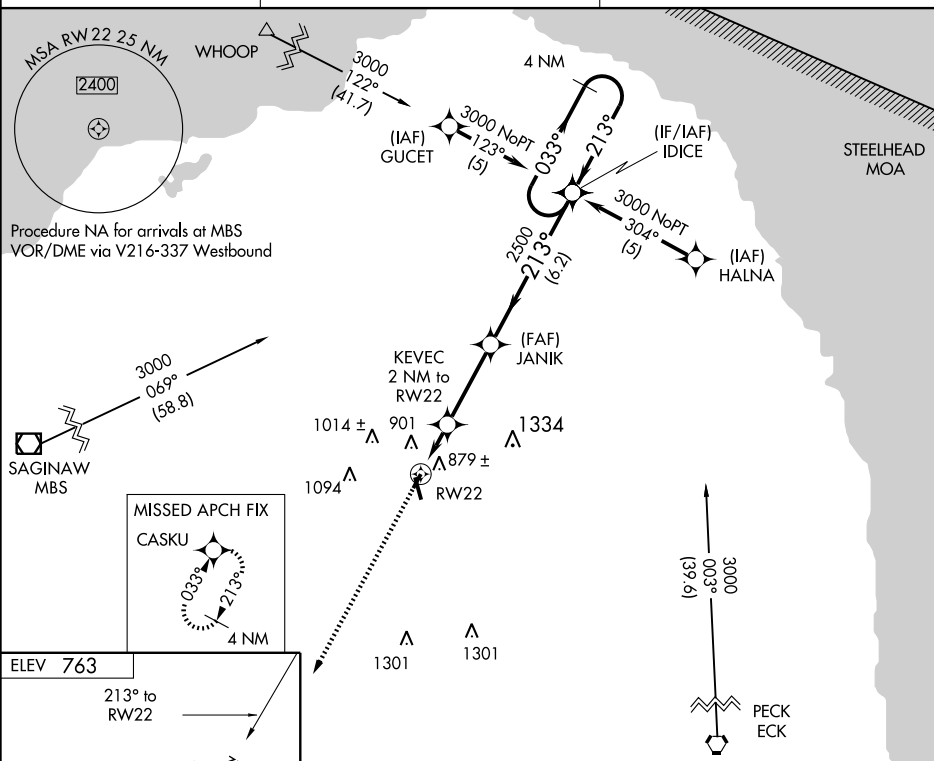
**▼** DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.  
**▲** When local altimeter setting not received, use MBS Intl altimeter setting and increase all MDAs 140 feet, and Cat C visibility ½ mile.

MISSED APPROACH: Climb to 3000 direct CASKU and hold.

AWOS-3  
**108.2**

CLEVELAND CENTER  
**127.7 307.8**

UNICOM  
**122.975 (CTAF) 0**



REIL Rwy 17 and 35 0  
 MRL Rwy 4-22 and 17-35 0

WAAS CH <b>62805</b> <b>W35A</b>	APP CRS <b>350°</b>	Rwy Idg TDZE <b>756</b> Apt Elev <b>763</b>	<b>5009</b> <b>756</b> <b>763</b>
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## RNAV (GPS) RWY 35

BAD AXE / HURON COUNTY MEMORIAL (BAX)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 54°C (130°F). VDP and Baro/VNAV NA when using Saginaw Intl altimeter setting. Visibility reduction by helicopters NA. DME/DME RNP-0.3 NA. If local altimeter setting not received, use Saginaw Intl altimeter setting and increase all DA's 129 feet and all MDAs 140 feet.

MISSED APPROACH: Climb to 3000 direct ELARE and hold.

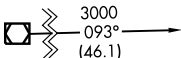
AWOS-3 <b>108.2</b>	CLEVELAND CENTER <b>127.7 307.8</b>	UNICOM <b>122.975 (CTAF) ①</b>
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MISSED APRCH FIX

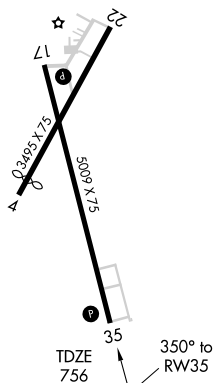


Procedure NA for arrivals on MBS VOR/DME via V320 northwest bound.

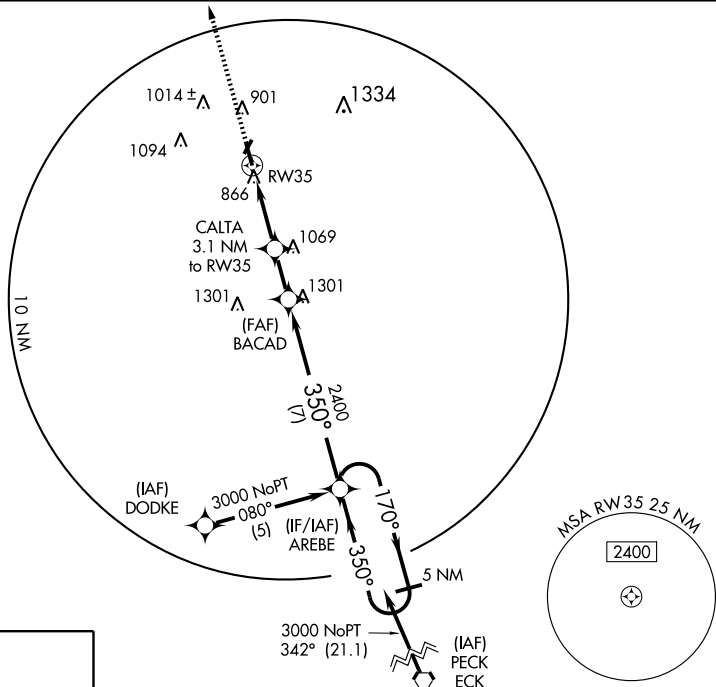
SAGINAW MBS


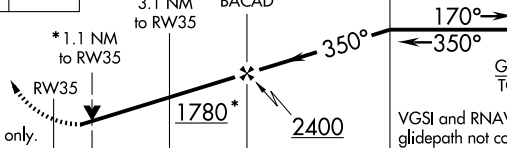


ELEV 763



REIL Rwy 17 and 35 ①  
MIRL Rwy 4-22 and 17-35 ①



3000 ↑	ELARE 	5 NM Holding Pattern		
 <p>* LNAV only.</p> <p>* 1.1 NM to RW35</p> <p>CALTA 3.1 NM to RW35</p> <p>BACAD</p> <p>AREBE</p> <p>170° → 3000</p> <p>← 350°</p> <p>GS 3.00° TCH 40</p> <p>VGS and RNAV glidepath not coincident.</p> <p>1.1 2 NM 1.9 NM 7 NM</p> <p>1780*</p> <p>2400</p>				
CATEGORY	A	B	C	D
LPV DA	1113-1¼ 357 (400-1¼)			NA
LNAV/ VNAV DA	1154-1½ 398 (400-1½)			NA
LNAV MDA	1120-1 364 (400-1)			NA
CIRCLING	1300-1 537 (600-1)	1320-1 557 (600-1)	1320-1½ 557 (600-1½)	NA

BAD AXE, MICHIGAN

Orig 09295

BAD AXE / HURON COUNTY MEMORIAL (BAX)

43°47'N - 82°59'W

RNAV (GPS) RWY 35



VOR/DME BAX  
**108.2**  
 Chan 19

APP CRS  
**039°**

Rwy Idg  
 TDZE  
 Apt Elev

**3195**  
**763**  
**763**

VOR RWY 4

BAD AXE / HURON COUNTY MEMORIAL (BAX)

▼ Visibility reduction by helicopters NA. When local altimeter setting not received, use MBS Intl altimeter setting and increase all MDAs 140 feet, and Cat B visibility ½ mile, Cat C visibility ½ mile, and DAMZO fix minimums visibility Cat C ½ mile.

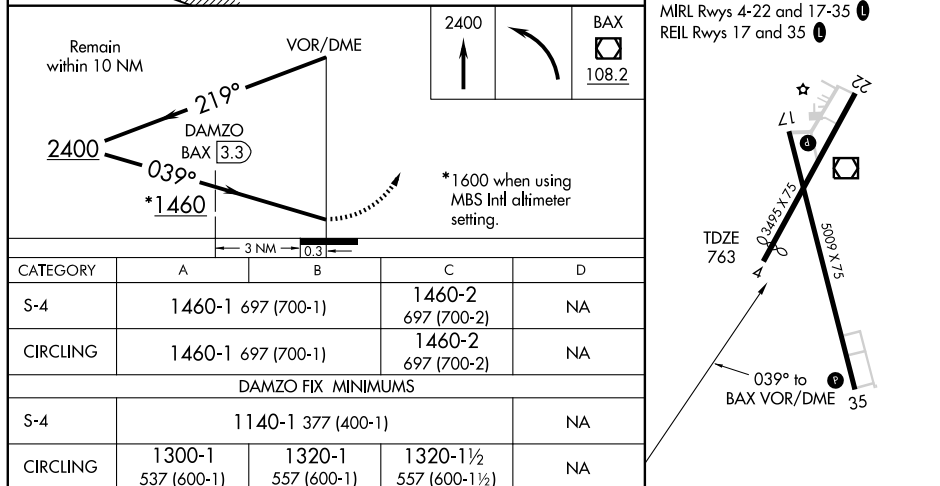
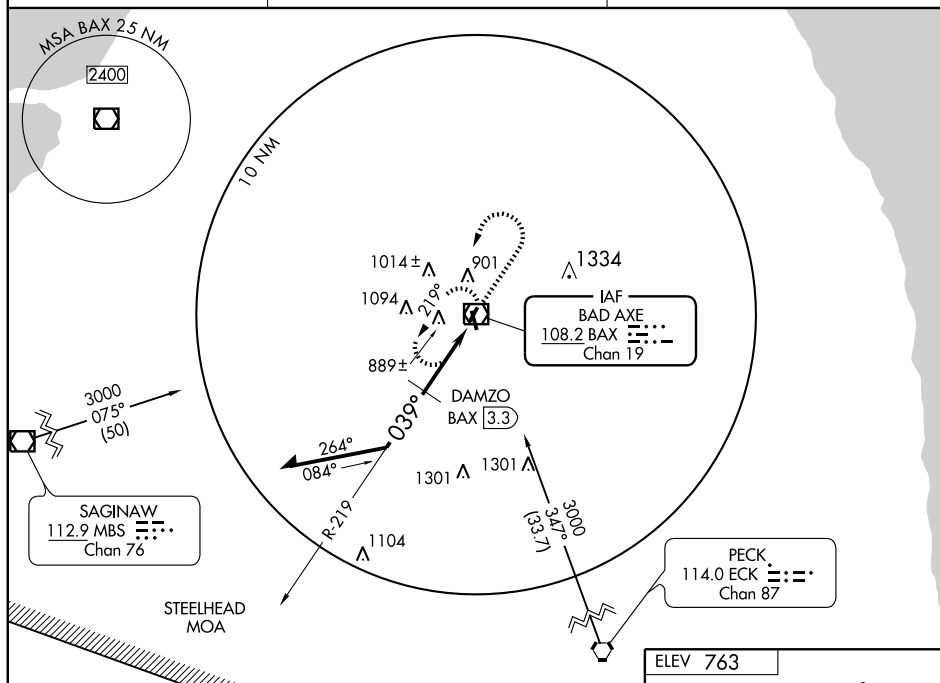
▲ NA

MISSED APPROACH: Climb to 2400 then left turn direct BAX VOR/DME and hold.

AWOS-3  
**108.2**

CLEVELAND CENTER  
**127.7 307.8**

UNICOM  
**122.975 (CTAF) 0**



VOR/DME BAX <b>108.2</b> Chan 19	APP CRS <b>207°</b>	Rwy Idg TDZE Apt Elev <b>3495</b> <b>763</b> <b>763</b>
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**VOR RWY 22**

BAD AXE / HURON COUNTY MEMORIAL (BAX)

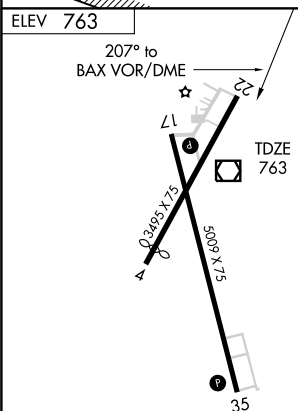
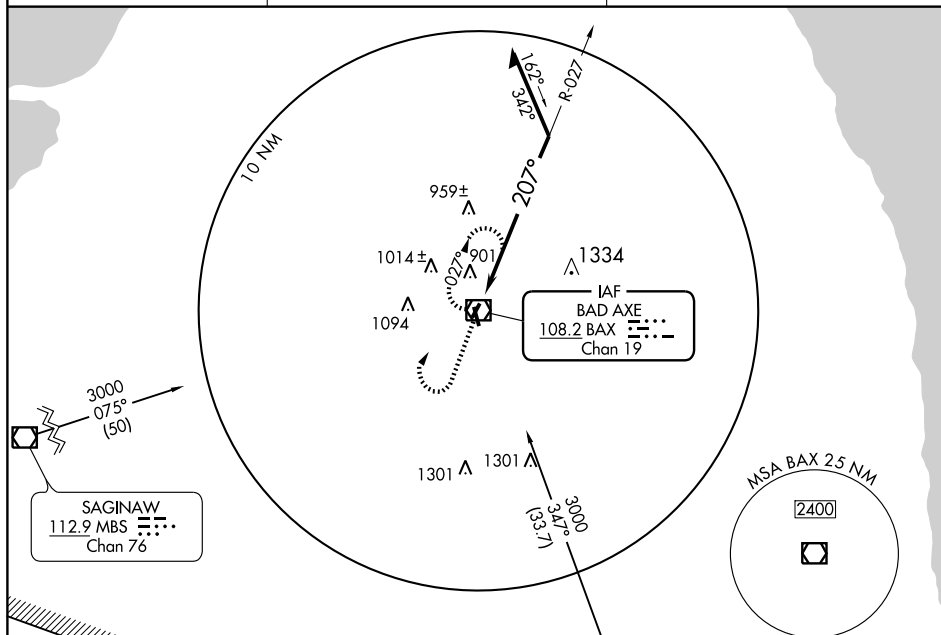
▼ Visibility reduction by helicopters NA. When local altimeter setting not received, use MBS Int altimeter setting and increase all MDAs 140 feet, and Cat C visibility ½ mile.

MISSED APPROACH: Climb to 2400 then right turn direct BAX VOR/DME and hold.

AWOS-3  
**108.2**

CLEVELAND CENTER  
**127.7 307.8**

UNICOM  
**122.975** (CTAF) **0**



2400  
↑  
BAX  
**108.2**

VOR/DME  
027°  
2400  
207°  
Remain within 10 NM

REIL Rwy 17 and 35 **0**  
MIRL Rwy 4-22 and 17-35 **0**

BAD AXE, MICHIGAN  
Amdt 10 09295

BAD AXE / HURON COUNTY MEMORIAL (BAX)

43°47'N - 82°59'W

**VOR RWY 22**

VOR/DME BAX <b>108.2</b> Chan <b>19</b>	APP CRS <b>358°</b>	Rwy Idg <b>5009</b> TDZE <b>756</b> Apt Elev <b>763</b>
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VOR RWY 35

BAD AXE / HURON COUNTY MEMORIAL (BAX)

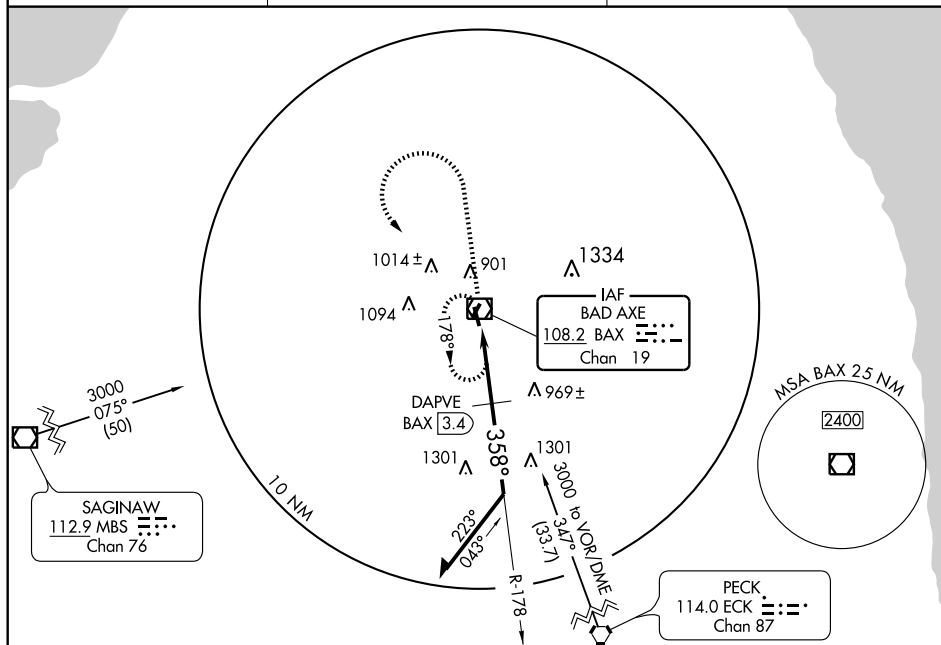
**T** If local altimeter setting not received, use Saginaw Intl altimeter setting and increase all MDAs 140 feet.

**A** NA Visibility reduction by helicopters NA.

**MISSED APPROACH:** Climb to 2400 then left turn direct BAX VOR/DME and hold.

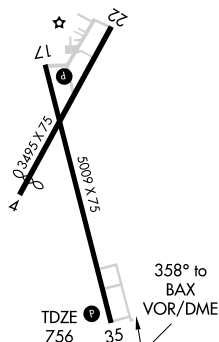
AWOS-3  
108.2

CLEVELAND CENTER  
127.7 307.8

UNICOM  
122.975 (CTAF) **L**

ELEV	763
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MIRL Rwy 4-22 and 17-35 **L**  
REIL Rwy 17 and 35 **L**



2400



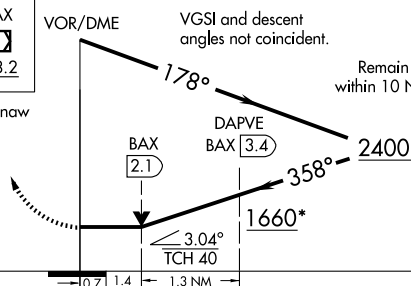
BAX

VOR/DME

VGSI and descent  
angles not coincident.

Remain  
within 10 NM

\* 1800 when using Saginaw Intl altimeter setting.



CATEGORY	A	B	C	D
S-35	1660-1¼ 904 (900-1¼)		1660-2¾ 904 (900-2¾)	NA
CIRCLING	1660-1¼ 897 (900-1¼)		1660-2¾ 897 (900-2¾)	NA
DAPVE FIX MINIMUMS				
S-35	1220-1 464 (500-1)		1220-1¼ 464 (500-1¼)	NA
CIRCLING	1300-1 537 (600-1)	1320-1 557 (600-1)	1320-1½ 557 (600-1½)	NA

BAD AXE, MICHIGAN  
Amdt 1 09295

BAD AXE / HURON COUNTY MEMORIAL (BAX)

43°47'N - 82°59'W

VOR RWY 35

**BALDWIN MUNI** (7D3) 2 S UTC-5(-4DT) N43°52.53' W85°50.53'

CHICAGO

828 NOTAM FILE LAN

L-281

RWY 09-27: H3800X75 (ASPH) S-10 0.3% up E

IAP

RWY 09: Trees. RWY 27: Trees.

RWY 05-23: 2800X100 (TURF)

RWY 05: Thld dspcd 800'. Trees.

RWY 23: Thld dspcd 800'. Trees.

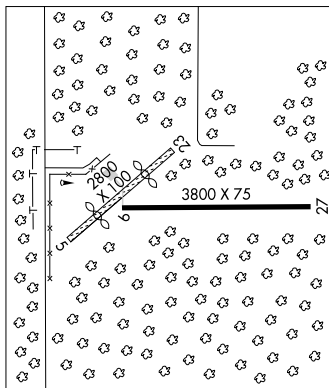
**AIRPORT REMARKS:** Unattended. Deer on and invof arpt. Arpt CLOSED Nov thru Apr; no snow removal. Rwy 09-27 sfc considerable pavement cracking with vegetation growing through cracks. Rwy 05-23 and dspcd thlds marked with 3' yellow cones.

**COMMUNICATIONS:** CTAF 122.9

① MINNEAPOLIS CENTER APP/DEP CON 120.85

**RADIO AIDS TO NAVIGATION:** NOTAM FILE LAN.

WHITE CLOUD (L) VOR/DME 117.6 HIC Chan 123 N43°34.49'  
W85°42.97' 344° 18.9 NM to fld. 920/1W.

**BANGU** N45°00.88' W84°48.48'. NOTAM FILE GLR.

LAKE HURON

NDB (LOM) 375 GL 097° 4.4 NM to Gaylord Rgnl.

**BARAGA** (2P4) 4 W UTC-5(-4DT) N46°47.10' W88°34.67'

GREEN BAY

845 NOTAM FILE GRB

RWY 09-27: 2200X100 (TURF)

RWY 09: Thld dspcd 600'. Trees. RWY 27: Trees.

**AIRPORT REMARKS:** Unattended. Arpt CLOSED Nov-Apr except to ski equipped acct. 25' p-line 850' from thld Rwy 27. Deer and birds on and invof arpt. Rwy 09 dspcd thld marked with 3' yellow cones.

**COMMUNICATIONS:** CTAF 122.9**BATH****UNIVERSITY AIRPARK** (41G) 2 NW UTC-5(-4DT) N42°50.42' W84°28.75'

DETROIT

856 B S2 NOTAM FILE LAN

RWY 08-26: 1988X100 (TURF) LIRL

RWY 08: Bldg. RWY 26: Tree.

**AIRPORT REMARKS:** Attended irregularly. Rwy 08-26 occasionally soft/wet areas E end during spring thaw and after heavy rain. ACTIVATE LIRL Rwy 08-26 and NSTD rotating bcn-122.85. NSTD flashing strobe and alternating white/red bcn. Rwy 08-26 marked with 3' yellow cones.

**COMMUNICATIONS:** CTAF 122.9**BATOL** N42°21.72' W85°11.06' NOTAM FILE BTL.

CHICAGO

NDB (MHW/LOM) 272 BT 226° 4.4 NM to W K Kellogg.

L-281

**BATTLE CREEK** N42°18.59' W85°15.14' NOTAM FILE BTL.

CHICAGO

(T) VORTACW 109.4 BTL Chan 31 at W K Kellogg. 922/2W.

L-281

VOR portion unusable 095°-112° byd 16 NM; 125°-170° and 235°-260° blo 4000'.

RCO 122.2 (LANSING RADIO)

VOR/DME HIC <b>117.6</b> Chan <b>123</b>	APP CRS <b>345°</b>	Rwy Idg TDZE Apt Elev	<b>N/A</b> <b>N/A</b> <b>828</b>
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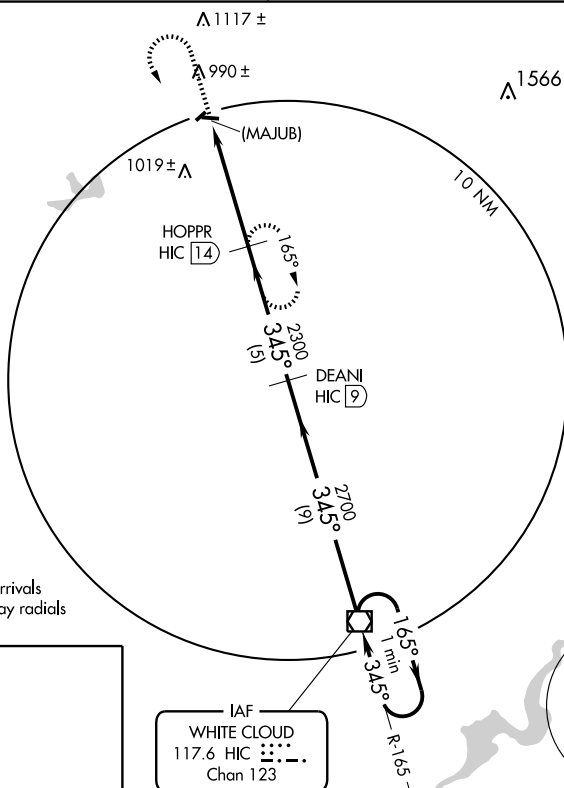
VOR/DME or GPS-A  
BALDWIN MUNI (7D3)

<b>T</b>	Use Manistee altimeter setting.
<b>A</b> NA	Procedure not authorized at night.

**MISSED APPROACH:** Climb to 2600, then left turn via the HIC VOR/DME R-345 to HOPPR/14 DME and hold.

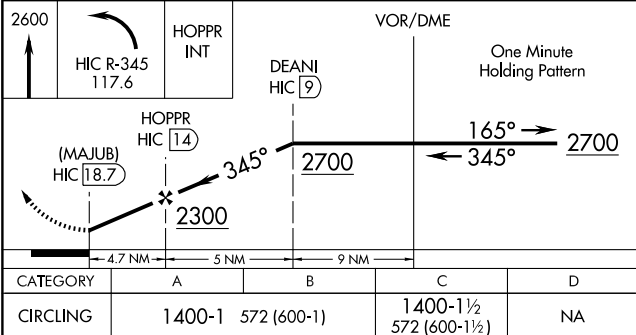
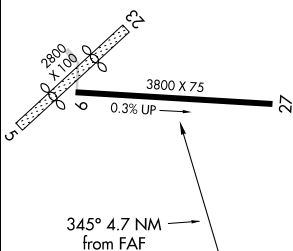
MINNEAPOLIS CENTER  
120.85 322.35

CTAF  
122.9



No procedure turn for arrivals  
on HIC VOR/DME airway radials  
087 CW 211.

ELEV 828



## AIRPORT DIAGRAM

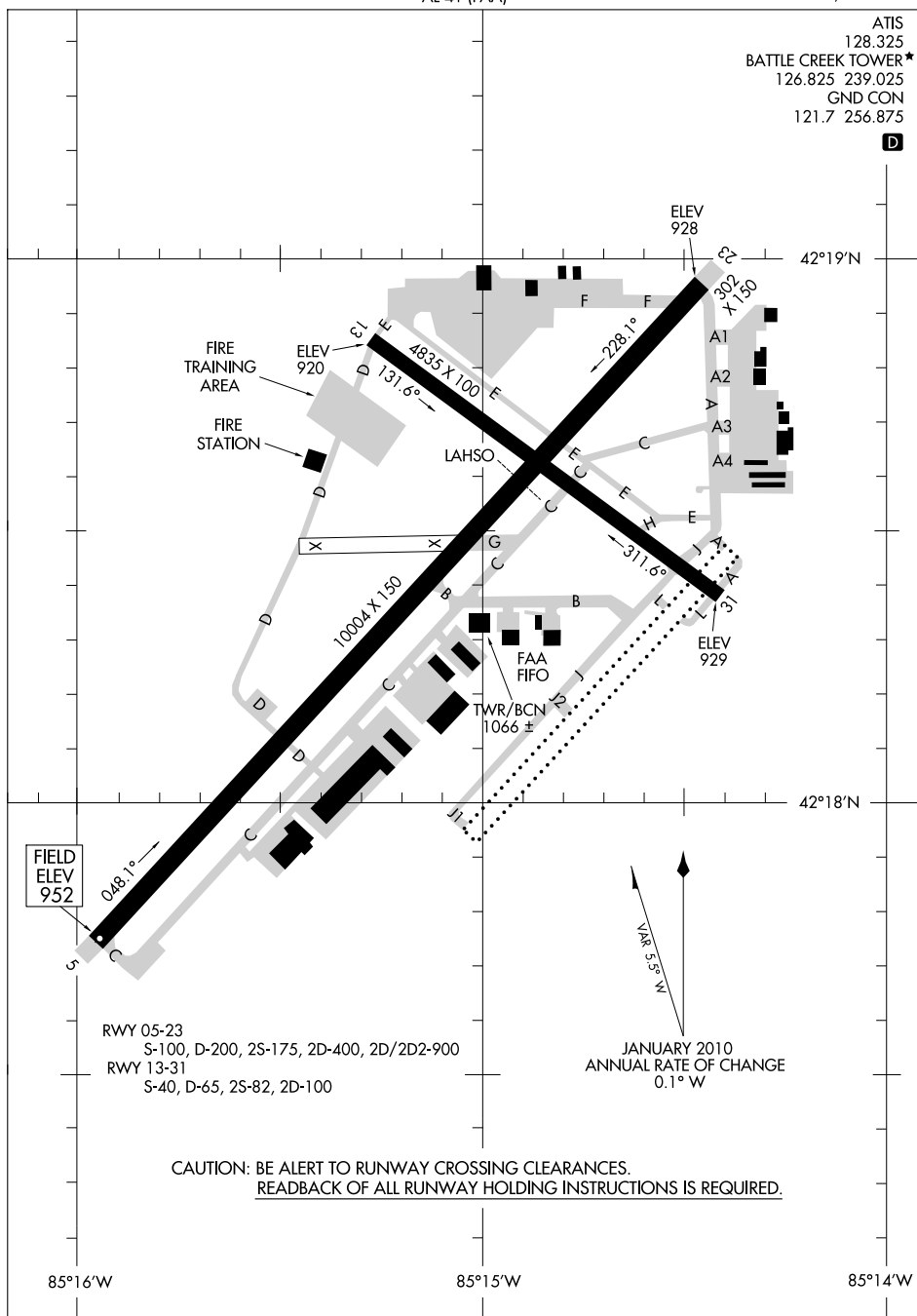
AL-41 (FAA)

BATTLE CREEK/ W.K. KELLOGG (BTL.)  
BATTLE CREEK, MICHIGAN

ATIS  
128.325  
BATTLE CREEK TOWER\*  
126.825 239.025  
GND CON  
121.7 256.875

D

EC-1, 23 SEP 2010 to 21 OCT 2010



EC-1, 23 SEP 2010 to 21 OCT 2010

## AIRPORT DIAGRAM

BATTLE CREEK, MICHIGAN  
BATTLE CREEK/ W.K. KELLOGG (BTL.)

**BATTLE CREEK****W K KELLOGG**

(BTL) 3 W UTC-5(-4DT) N42°18.44' W85°15.09'

952 B S4 FUEL 100LL, JET A OX 3 LRA Class IV, ARFF Index A

NOTAM FILE BTL

RWY 05-23: H10004X150 (ASPH-PFC) S-100, D-200, 2S-175,  
2D-400, 2D/2D2-900 HIRL

RWY 05: REIL. VASI(V4L)—GA 3.0° TCH 49'. Tree. 0.4% down.

RWY 23: MALSR. PAPI(P4L). Pole.

RWY 13-31: H4835X100 (ASPH-GRVD) S-40, D-65, 2S-82,  
2D-100 MIRL

RWY 13: REIL. VASI(V4L)—GA 3.0° TCH 35'. Railroad.

RWY 31: REIL. VASI(V4L)—GA 3.0° TCH 56'. Road.

**LAND AND HOLD SHORT OPERATIONS**

LANDING	HOLD SHORT POINT	DIST AVBL
RWY 05	13-31	7000

**RUNWAY DECLARED DISTANCE INFORMATION**

RWY 05: TORA-10003 TODA-10003 ASDA-10003 LDA-10003

RWY 13: TORA-4835 TODA-4835 ASDA-4835 LDA-4835

RWY 23: TORA-10003 TODA-10003 ASDA-10003 LDA-10003

RWY 31: TORA-4835 TODA-4835 ASDA-4835 LDA-4835

**AIRPORT REMARKS:** Attended continuously. 48 hr PPR for unscheduled air carrier ops with more than 30 passenger seats call arpt manager 269-966-3470. Deer and birds on and invof arpt.

Extensive pilot training within 25 NM of BTL VOR. When twr clsd HIRL Rwy 05-23 preset low ints. To increase ints and ACTIVATE MALSR Rwy 23, MIRL Rwy 13-31 and REIL Rwy 05, Rwy 13 and Rwy 31—CTAF. ARFF provided 24 hrs call 269-969-3349/3317. Index C ARFF avbl on request 48 hrs PPR call 269-966-3470. For customs call 269-965-3349.

**WEATHER DATA SOURCES:** ASOS (269) 964-0283. LAWRS.**COMMUNICATIONS:** CTAF 126.825 ATIS 128.325 UNICOM 122.95

BATTLE CREEK RCD 122.2 (LANSING RADIO)

® KALAMAZOO APP/DEP CON 119.2 (1100-0400Z‡)

® CHICAGO CENTER APP/DEP CON 127.55 (0400-1100Z‡)

BATTLE CREEK TOWER 126.825 (1100-0300Z‡) GND CON 121.7

**AIRSPACE:** CLASS D svc effective 1100-0300Z‡ other times CLASS G.**RADIO AIDS TO NAVIGATION:** NOTAM FILE BTL.

BATTLE CREEK (T) VORTACW 109.4 BTL Chan 31 N42°18.59' W85°15.14' at fld. 922/2W. .

BATOL NDB (MHW/LOM) 272 BT N42°21.72' W85°11.06' 226° 4.4 NM to fld.

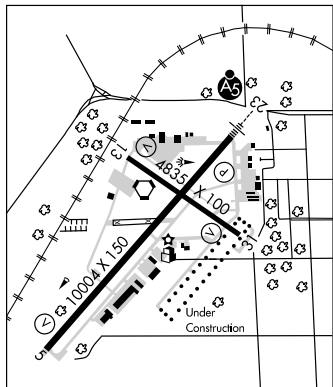
ILS 110.5 I-BTL Rwy 23. Class IB. LOM BATOL NDB. Unmonitored when twr clsd.

ASR (1100-0400Z‡)

CHICAGO

H-5E, 10F, L-281

IAP, AD



VORTAC BTL  
109.4  
Chan 31

APCH CRS  
231°

Rwy ldg 10,003  
TDZE 929  
Arpt Elev 952

JAL-41 [USAF]

BATTLE CREEK/W. K. KELLOGG (KBTL)

NOTE: When Control Tower closed, except for operators with approved weather reporting service, use Grand Rapids altimeter setting.



MISSED APPROACH: Climbing left turn to 3000 via BTL VORTAC R-177 to REIMN Int and hold.

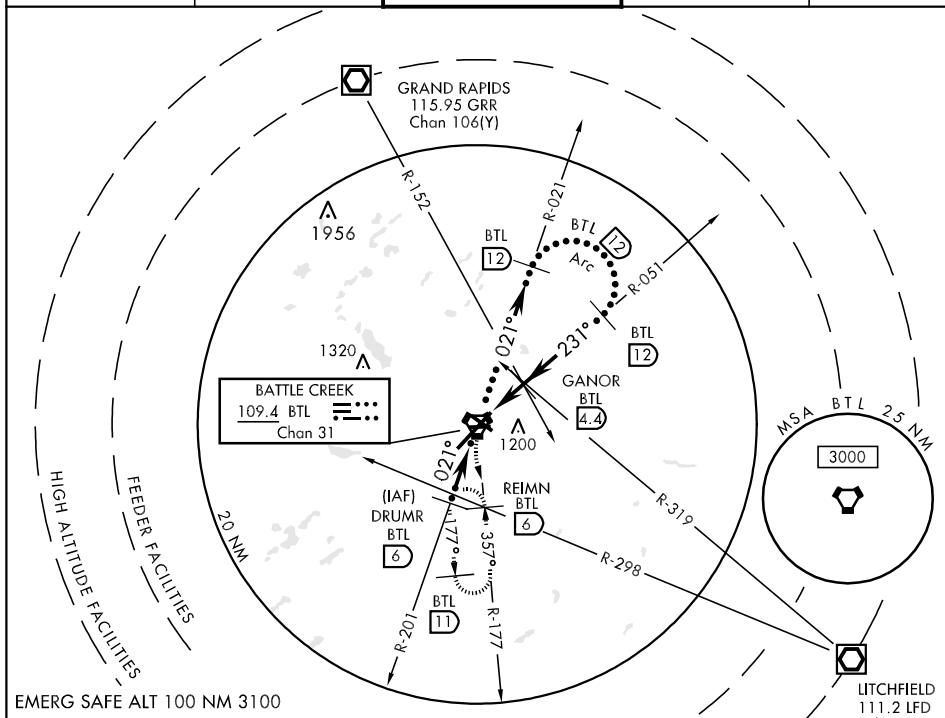
ATIS  
128.325

KALAMAZOO APP CON  
119.2 340.9

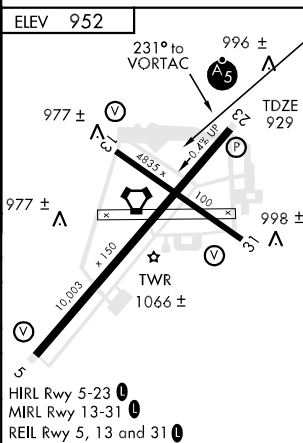
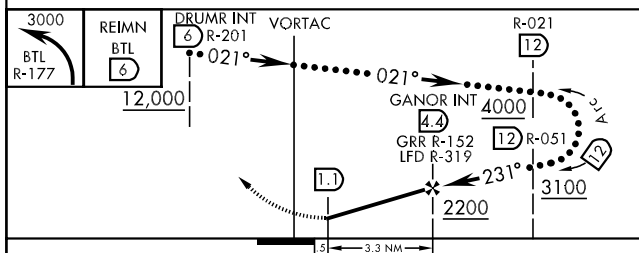
BATTLE CREEK TOWER ★  
126.825 (CTAF) 0 239.025

GND CON  
121.7 256.875

ASR



EMERG SAFE ALT 100 NM 3100



CATEGORY	C	D	E
S-23	1380/40 451 (500-¾)	1380/50 451 (500-1)	
CIRCLING	1480-1½ 528 (600-1½)	1520-2 568 (600-2)	1740-2¾ 788 (800-2¾)
GRAND RAPIDS ALTIMETER SETTING MINIMUMS			
S-23	1540-1¼ 611 (700-1¼)	1540-1½ 611 (700-1½)	1540-1¾ 611 (700-1¾)
CIRCLING	1640-2 688 (700-2)	1680-2¼ 728 (800-2¼)	1900-3 948 (1000-3)



LOC I-BTL **110.5** APP CRS **227°** Rwy Idg **10003**  
 TDZE **929**  
 Apt Elev **952**

# ILS or LOC RWY 23

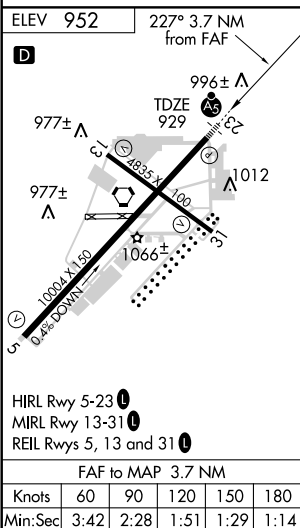
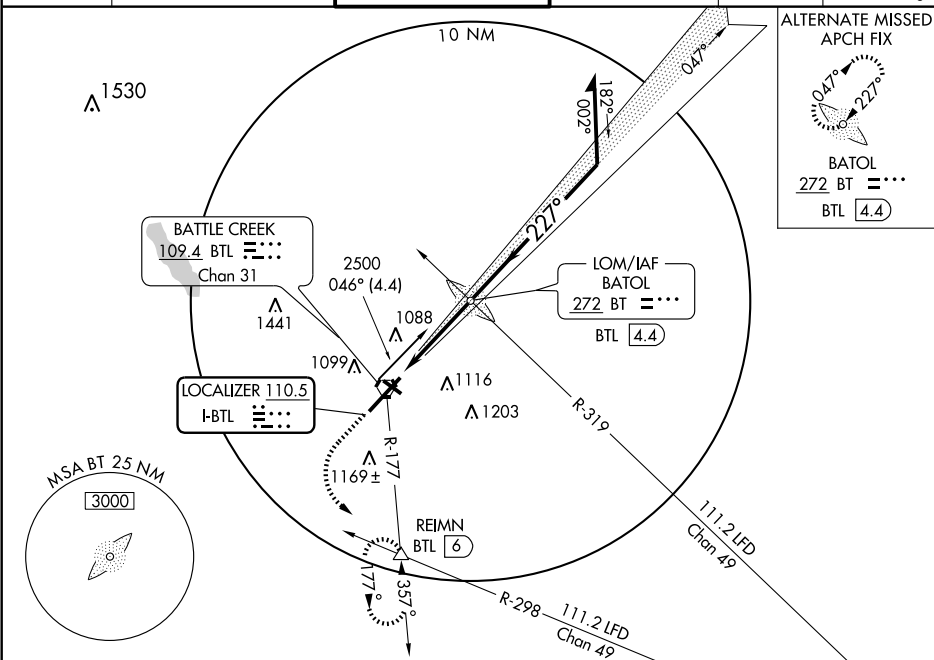
BATTLE CREEK / W.K. KELLOGG (BTL)

When control tower closed, except for operators with approved weather reporting service, use Grand Rapids altimeter setting.  
 \* RVR 1800 authorized with the use of FD or AP or HUD to DA.



MISSED APPROACH: Climb to 1400 then climbing left turn to 3000 via BTL R-177 to REIMN Int/BTL 6 DME and hold.

ATIS <b>128.325</b>	KALAMAZOO APP CON ★ <b>119.2 340.9</b>	BATTLE CREEK TOWER ★ <b>126.825 239.025</b>	GND CON <b>121.7 256.875</b>	UNICOM <b>122.95</b>	CTAF <b>126.825</b>
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ELEV 952	227° 3.7 NM from FAF	1400	3000	REIMN	BATOL LOM/INT BTL 4.4	Remain within 10 NM
D	996± A	977± A	977± A	1012	2172	047°
TDZE 929	996± A	977± A	977± A	1012	2200	227°
1000 x 150	1066±	1066±	1066±	1066±	2200	GS 2.98° TCH 49
3.7 NM	3.7 NM	3.7 NM	3.7 NM	3.7 NM	3.7 NM	3.7 NM
CATEGORY	A	B	C	D		
S-ILS 23	*1129/24		200 (200-½)			
S-LOC 23	1340/24	411 (400-½)	1340/40	411 (400-¾)		
CIRCLING	1420-1 468 (500-1)	1440-1 488 (500-1)	1480-1½ 528 (600-1½)	1520-2 568 (600-2)		
GRAND RAPIDS ALTIMETER SETTING MINIMUMS						
S-ILS 23	1289-¾		360 (400-¾)			
S-LOC 23	1500-¾	571 (600-¾)	1500-1 571 (600-1)	1500-1¼ 571 (600-1¼)		
CIRCLING	1580-1 628 (700-1)	1600-1 648 (700-1)	1640-2 688 (700-2)	1680-2¼ 728 (800-2¼)		

BATTLE CREEK, MICHIGAN

Amdt 17C 10266

BATTLE CREEK / W.K. KELLOGG (BTL)

42°18'N - 85°15'W

# ILS or LOC RWY 23

## LAND AND HOLD SHORT OPERATIONS (LAHSO)

LAHSO is an acronym for "Land and Hold Short Operations." These operations include landing and holding short of an intersection runway, an intersecting taxiway, or other predetermined points on the runway other than a runway or taxiway. Measured distance represents the available landing distance on the landing runway, in feet.

Specific questions regarding these distances should be referred to the air traffic manager of the facility concerned. The Aeronautical Information Manual contains specific details on hold-short operations and markings.

CITY/AIRPORT	LDG RWY	HOLD-SHORT POINT	MEASURED DISTANCE
BATTLE CREEK, MI W.K. KELLOGG (BTL)	05	13-31	7,000 feet
DETROIT, MI COLEMAN A. YOUNG MUNI (DET)	15	07-25	4,900 feet
FLINT, MI BISHOP INTL (FNT)	09 36	18-36 09-27	4,100 feet 6,300 feet
JACKSON, MI JACKSON COUNTY-REYNOLDS FIELD (JXN)	24	14-32	3,406 feet
TRAVERSE CITY, MI CHERRY CAPITAL (TVC)	18 28 28	10-28 18-36 18-36	2,850 feet 5,500 feet 5,500 feet

23 SEP 2010 to 21 OCT 2010

23 SEP 2010 to 21 OCT 2010

LOM BT	APP CRS	Rwy Idg	<b>10003</b>
<u><b>272</b></u>	<b>227°</b>	TDZE	<b>929</b>
		Apt Elev	<b>952</b>

NDB RWY 23

BATTLE CREEK / W.K. KELLOGG (BTL)

<b>T</b>	When control tower closed, except for operators with
<b>A NA</b>	approved weather reporting service, use Grand Rapids
<b>ASP</b>	altimeter setting.

MALSR

**MISSED APPROACH:** Climbing left turn to 3000 via BTL R-177 to REIMN Int/BTL 6 DME and hold.

ATIS  
**128,325**

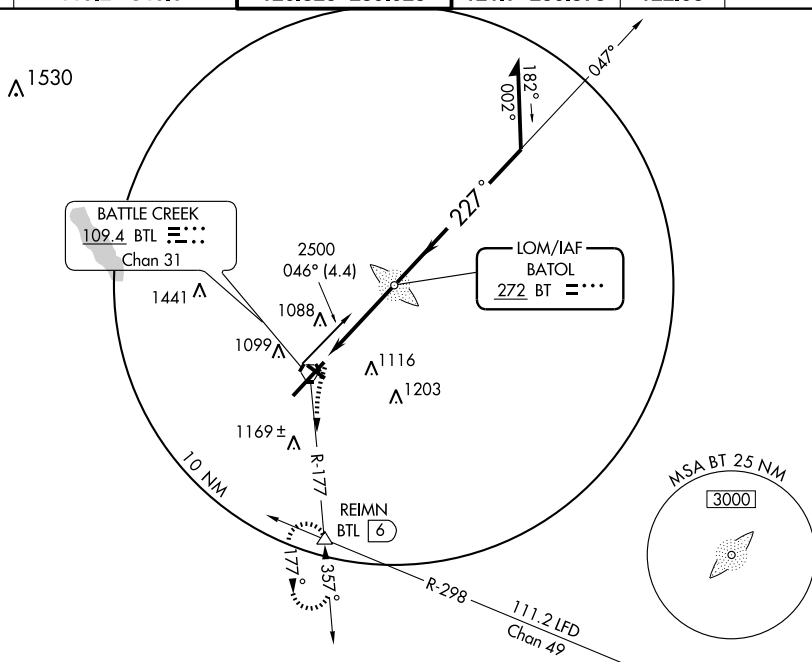
KALAMAZOO APP CON ★  
119.2 340.9

BATTLE CREEK TOWER ★  
126,825 239,025

GND CON  
121.7 256.875

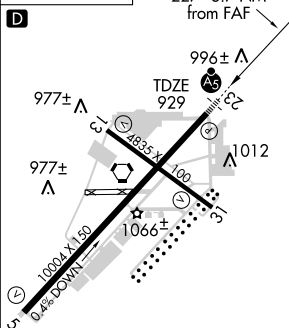
UNICOM  
122.95

CTAF  
126.825 **L**



ELEV	952
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227° 3.7 NM



HIRL Rwy 5-23 **L**  
MIRL Rwy 13-31 **L**  
REIL Rwy 5, 13 and 31 **L**

FAF to MAP 3.7 NM

Knots	60	90	120	150	180
Min:Sec	3:42	2:28	1:51	1:29	1:14

BATTLE CREEK, MICHIGAN

Amdt 17 10266

3000	REIMN
------	-------



BTL R-177

LOM

Remain  
within 10 NM

• • •

1

✱

CATEGORY	A	B	C	D
S-23	1440/40	511 (500-¾)	1440/50 511 (500-1)	1440/60 511 (500-1¼)
CIRCLING	1440-1	488 (500-1)	1480-1½ 528 (600-1½)	1520-2 568 (600-2)

## GRAND RAPIDS ALTIMETER SETTING MINIMUMS

S-23	1600-¾ 671 (700-¾)	1600-1½ 671 (700-1½)	1600-2 671 (700-2)
CIRCLING	1600-1 648 (700-1)	1640-2 688 (700-2)	1680-2¼ 728 (800-2¼)

BATTLE CREEK / W.K. KELLOGG (BTL)

NDB RWY 23

WAAS CH <b>90311</b> <b>W05A</b>	APP CRS <b>047°</b>	Rwy Idg <b>10003</b> TDZE <b>952</b> Apt Elev <b>952</b>
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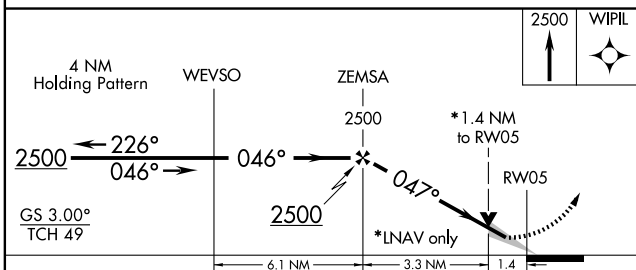
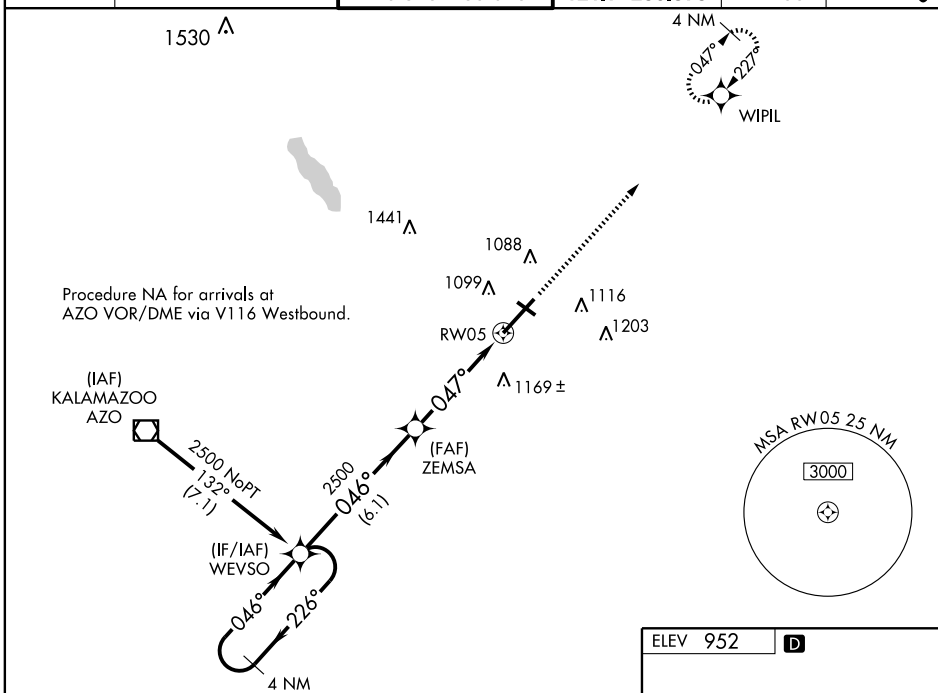
# RNAV (GPS) RWY 5

## BATTLE CREEK / W.K. KELLOGG (BTL)

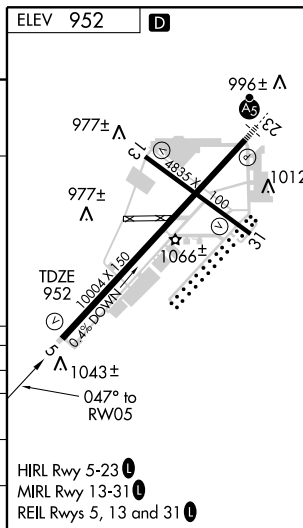
**▲** For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 46°C (114°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Grand Rapids altimeter setting and increase LPV DA 107 feet, LNAV/VNAV DA 236 feet, and all MDA 120 ASR feet, increase LPV visibility ½ mile all Cats, and LNAV/VNAV visibility ¾ mile all Cats, LNAV Cat C and D visibility ½ mile, Circling Cat C and D visibility ¼ mile. VDP and Baro-VNAV NA when using Grand Rapids altimeter setting.

**MISSED APPROACH:**  
Climb to 2500 direct  
WIPIL and hold.

ATIS 128.325	KALAMAZOO APP CON ★ 119.2 340.9	BATTLE CREEK TOWER ★ 126.825 239.025	GND CON 121.7 256.875	UNICOM 122.95	CTAF 126.825
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CATEGORY	A	B	C	D
LPV DA	1262-1 310 (400-1)			
LNAV/ VNAV DA	1328-1¼ 376 (400-1¼)			
LNAV MDA	1440-1 488 (500-1)		1440-1¼ 488 (500-1¼)	1440-1½ 488 (500-1½)
CIRCLING	1440-1 488 (500-1)	1500-1 548 (600-1)	1500-1½ 548 (600-1½)	1520-2 568 (600-2)



WAAS CH <b>56411</b> <b>W23A</b>	APP CRS <b>227°</b>	Rwy Idg <b>10003</b> TDZE <b>929</b> Apt Elev <b>952</b>
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# RNAV (GPS) RWY 23

BATTLE CREEK / W.K. KELLOGG (BTL)

**▼** For inoperative MALS/R, increase LPV all Cats visibility to RVR 5000. For inoperative MALS/R when using Grand Rapids altimeter setting, increase LPV all Cats visibility to RVR 6000.  
**▲** For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 46°C (114°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Grand Rapids altimeter setting and increase all DA 107 feet, and all MDA 120 feet. Increase LPV visibility all Cats to RVR 4000, LNAV/VNAV all Cats visibility to 1½ miles, and LNAV Cat C to RVR 5000, Cat D to RVR 6000. Increase Circling visibility Cats C/D ¼ mile. VDP and Baro-VNAV NA when using Grand Rapids altimeter setting.

MALS/R



**MISSED APPROACH:**  
Climb to 2500 direct WEVSO and hold.

ATIS <b>128.325</b>	KALAMAZOO APP CON ★ <b>119.2 340.9</b>	<b>BATTLE CREEK TOWER ★</b> <b>126.825 239.025</b>	GND CON <b>121.7 256.875</b>	UNICOM <b>122.95</b>	CTAF <b>126.825</b>
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Procedure NA for arrivals at GRR VOR/DME via V285 Northbound.

GRAND RAPIDS GRR

2000  
145°  
(12.7)2500 NoPT  
137°  
(5)

4 NM

2500 NoPT  
230°  
(24.2)

(IAF) LANSING LAN



(IAF) LANSING LAN

Procedure NA for arrivals at LAN VORTAC on airway radials 247 CW 282.

▲ 1530

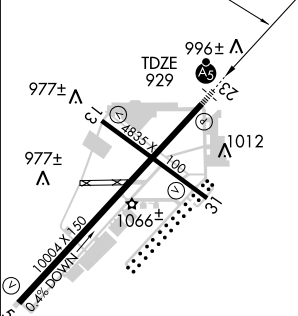
MISSED APRCH FX

WEVSO

4 NM

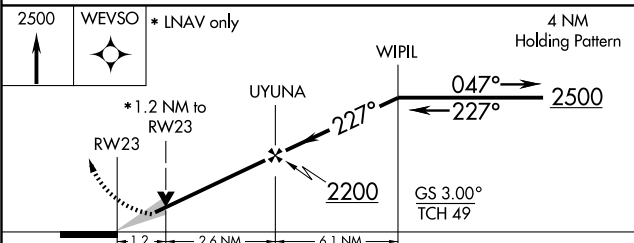
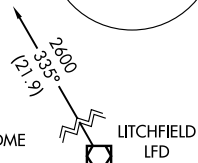
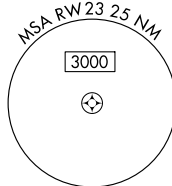
ELEV 952

D



HIRL Rwy 5-23  
MIRL Rwy 13-31  
REIL Rwy 5, 13 and 31

Procedure NA for arrivals at LFD VOR/DME on airway radials 280 CW 297.



CATEGORY	A	B	C	D
LPV DA		1210/24	281 (300-½)	
LNAV/VNAV DA		1419/60	490 (500-1¼)	
LNAV MDA	1360/24	431 (500-½)	1360/40 431 (500-¾)	1360/50 431 (500-1)
CIRCLING	1400-1 448 (500-1)	1500-1 548 (600-1)	1500-1½ 548 (600-1½)	1520-2 568 (600-2)

VORTAC BTL  
**109.4**  
Chan **31**

APP CRS  
**300°**

Rwy Idg  
TDZE  
Apt Elev

**4835**  
**930**  
**952**

## VOR or TACAN or GPS RWY 31

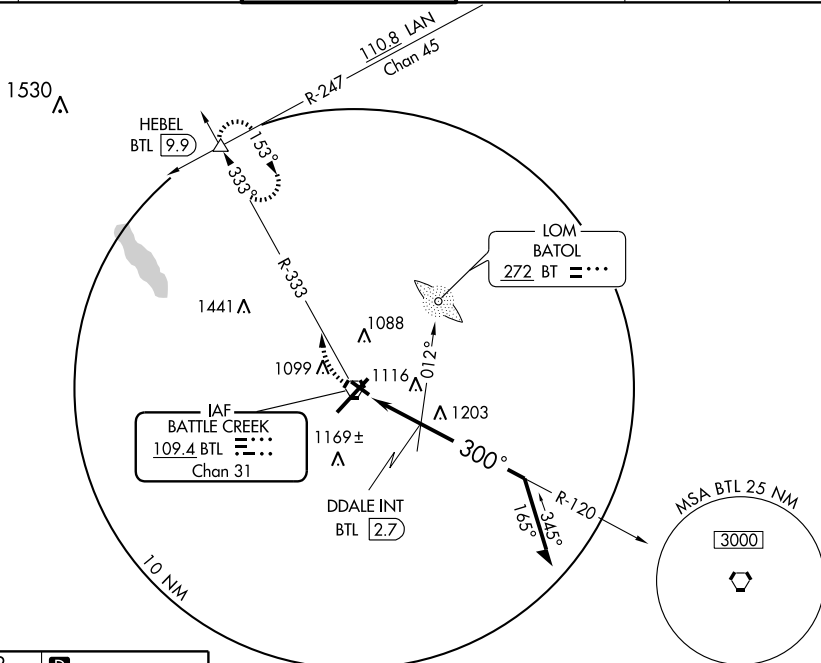
BATTLE CREEK / W.K. KELLOGG (BTL)

When control tower closed, except for operators with approved weather reporting service, use Grand Rapids altimeter setting and increase all MDAs 160 feet and all visibilities  $\frac{3}{4}$  mile.

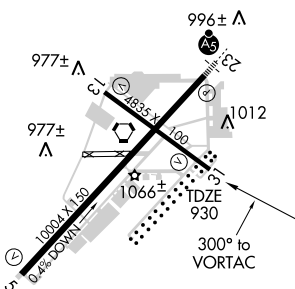
ASR Air carrier landing visibility reduction for local conditions not authorized.

MISSED APPROACH: Climbing right turn to 3000 via BTL R-333 to HEBEL Int/BTL 9.9 DME and hold.

ATIS <b>128.325</b>	KALAMAZOO APP CON ★ <b>119.2 340.9</b>	BATTLE CREEK TOWER ★ <b>126.825 239.025</b>	GND CON <b>121.7 256.875</b>	UNICOM <b>122.95</b>	CTAF <b>126.825</b>
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ELEV 952 D

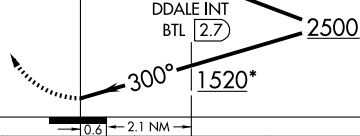


3000 HEBEL  
BTL R-333 109.4

VORTAC

Remain within 10 NM

\*1680 when using Grand Rapids altimeter setting.



CATEGORY	A	B	C	D
S-31	1520-1	590 (600-1)	1520-1½ 590 (600-1½)	1520-1¾ 590 (600-1¾)
CIRCLING	1520-1	568 (600-1)	1520-1½ 568 (600-1½)	1520-2 568 (600-2)
DDALE MINIMUMS				
S-31	1380-1	450 (500-1)	1380-1¼ 450 (500-1¼)	1380-1½ 450 (500-1½)
CIRCLING	1420-1 468 (500-1)	1440-1 488 (500-1)	1480-1½ 528 (600-1½)	1520-2 568 (600-2)

VORTAC BTL  
109.4  
Chan 31

APP CRS  
040°

Rwy Idg  
TDZE  
Apt Elev  
10003  
952

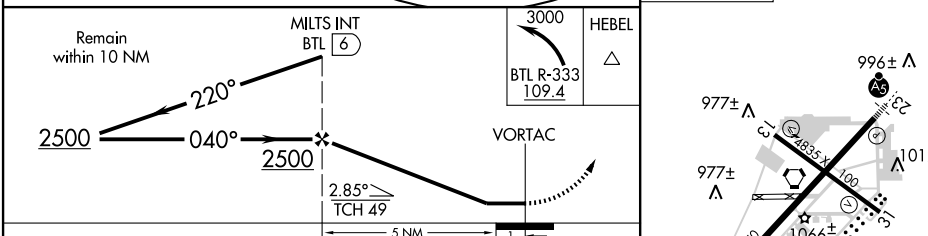
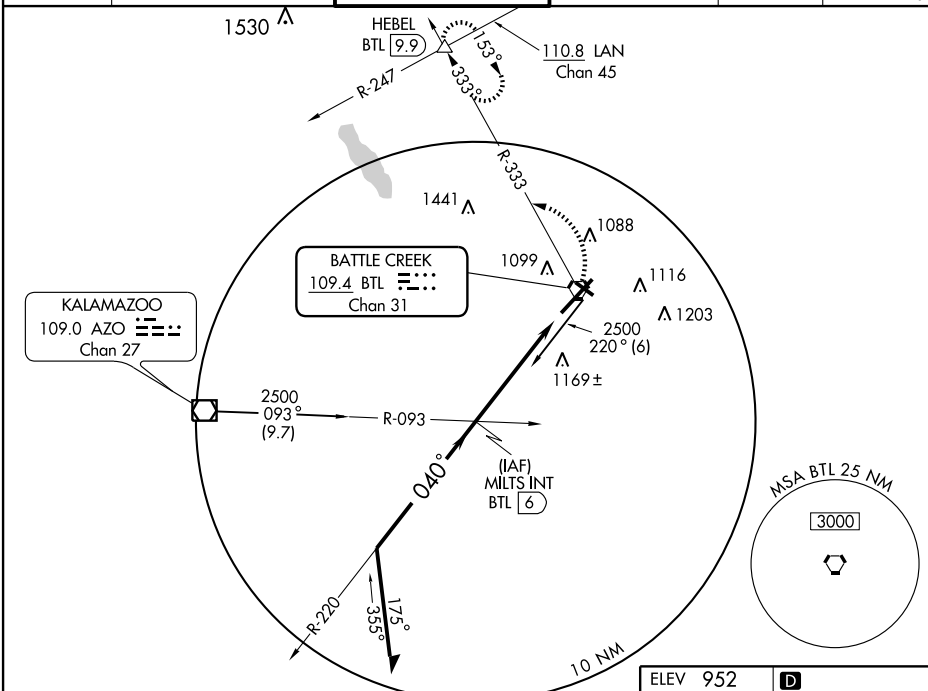
## VOR or TACAN RWY 5

BATTLE CREEK / W.K. KELLOGG (BTL)

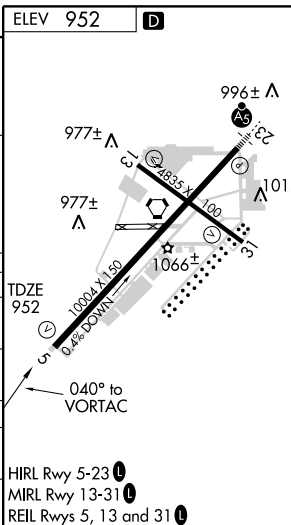
When control tower closed, except for operators with approved weather reporting service, use Grand Rapids altimeter setting.

MISSED APPROACH: Climbing left turn to 3000 via BTL R-333 to HEBEL Int/BTL 9.9 DME and hold.

ATIS 128.325	KALAMAZOO APP CON ★ 119.2 340.9	BATTLE CREEK TOWER ★ 126.825 239.025	GND CON 121.7 256.875	UNICOM 122.95	CTAF 126.825
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CATEGORY	A	B	C	D
S-5	1400-1	448 (500-1)	1400-1¼ 448 (500-1¼)	1400-1½ 448 (500-1½)
CIRCLING	1420-1 468 (500-1)	1440-1 488 (500-1)	1480-1½ 528 (600-1½)	1520-2 568 (600-2)
GRAND RAPIDS ALTIMETER SETTING MINIMUMS				
S-5	1560-1	608 (700-1)	1560-1¾ 608 (700-1¾)	1560-2 608 (700-2)
CIRCLING	1580-1 628 (700-1)	1600-1 648 (700-1)	1640-2 688 (700-2)	1680-2¼ 728 (800-2¼)



VORTAC BTL  
**109.4**  
 Chan 31

APP CRS  
**231°**

Rwy Idg **10003**  
 TDZE **929**  
 Apt Elev **952**

VOR RWY 23

BATTLE CREEK / W.K. KELLOGG (BTL)



For inoperative MALS, increase S-23 Cats A/B visibility to RVR 5000. Visibility reduction by helicopters NA. When local altimeter setting not received, use Grand Rapids altimeter setting and increase all MDA 120 feet, increase Cat C visibility to RVR 5000, Cat D visibility to RVR 6000, and Circling Cat C and D visibility ¼ mile. VDP NA when using Grand Rapids altimeter setting.

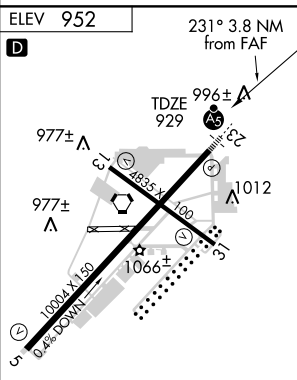
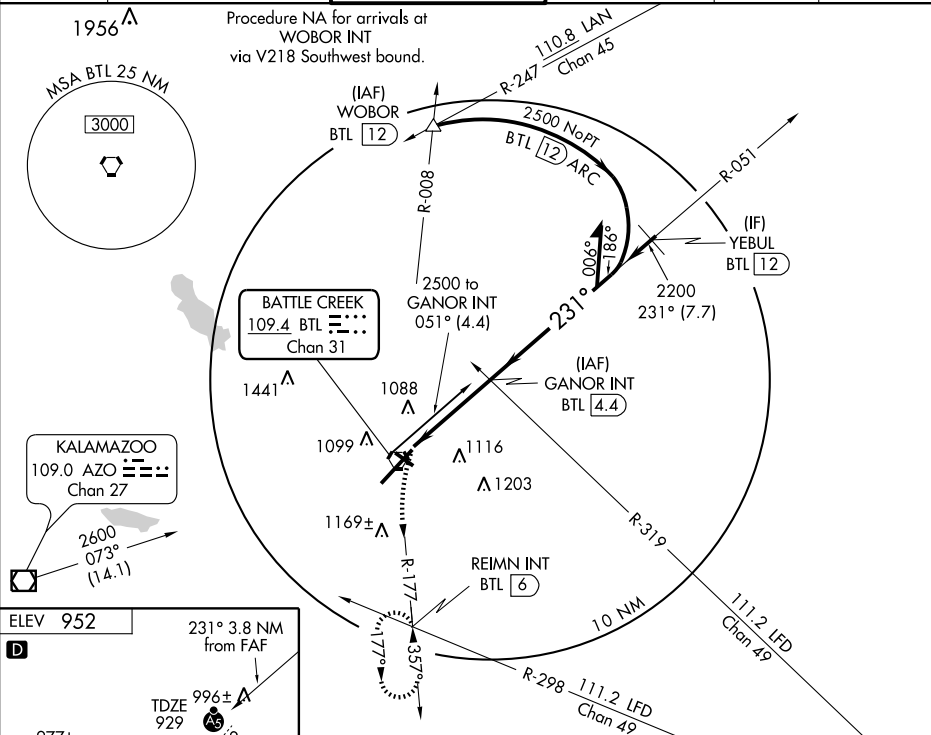
MALS



MISSED APPROACH:

Climbing left turn to 3000  
 via BTL VORTAC R-177  
 to REIMN INT/6 DME and hold,  
 continue climb-in-hold to 3000.

ATIS <b>128.325</b>	KALAMAZOO APP CON ★ <b>119.2 340.9</b>	BATTLE CREEK TOWER ★ <b>126.825 239.025</b>	GND CON <b>121.7 256.875</b>	UNICOM <b>122.95</b>	CTAF <b>126.825 0</b>
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HIRL Rwy 5-23  
 MIRL Rwy 13-31  
 REIL Rws 5, 13 and 31

FAF to MAP 3.8 NM					
Knots	60	90	120	150	180
Min:Sec	3:48	2:32	1:54	1:31	1:16

BATTLE CREEK, MICHIGAN

Amdt 18 10266

42°18'N - 85°15'W

BATTLE CREEK / W.K. KELLOGG (BTL)

VOR RWY 23



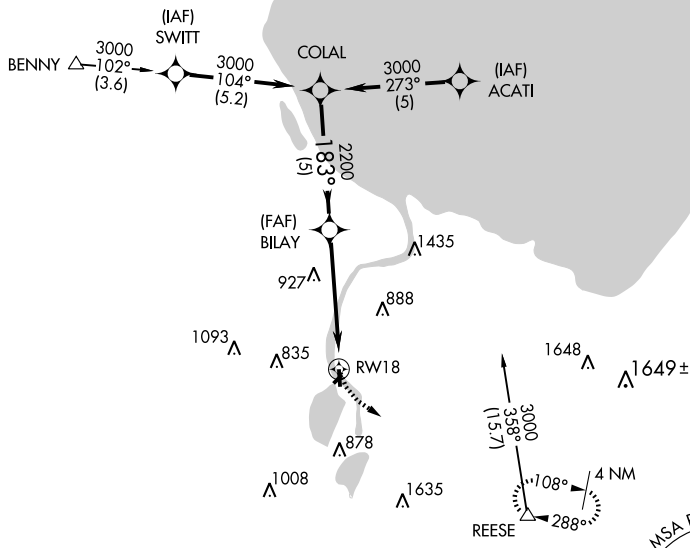


APP CRS  
**183°**Rwy Idg **3798**  
TDZE **586**  
Apt Elev **586****RNAV (GPS) RWY 18**

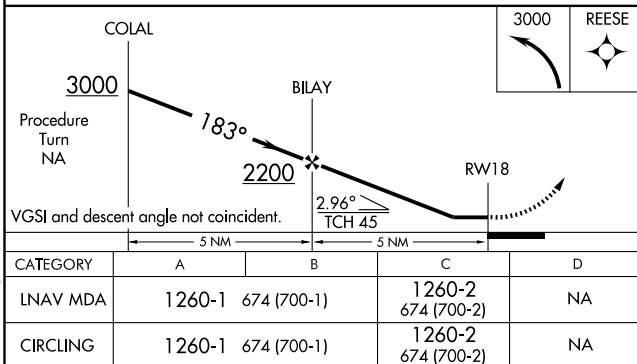
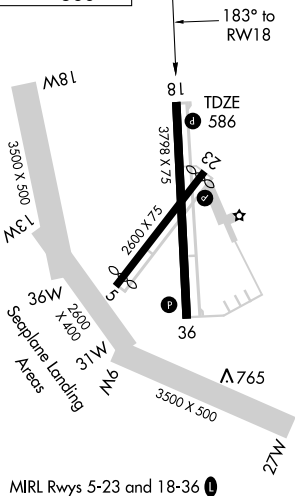
BAY CITY/ JAMES CLEMENTS MUNI (3CM)



NA

GPS or RNP -0.3 required. DME/DME RNP -0.3 NA.  
Use Saginaw altimeter setting.  
Straight-in minimums NA at night.  
Circling NA southeast of Rwy 23 and 36.MISSED APPROACH: Climbing left turn  
to 3000 direct REESE WP and hold.SAGINAW APP CON ★  
**120.95 235.625**UNICOM  
**122.8 (CTAF) 0**

ELEV 586



VOR/DME MBS <b>112.9</b> Chan <b>76</b>	APP CRS <b>087°</b>	Rwy Idg TDZE Apt Elev <b>N/A</b> <b>N/A</b> <b>586</b>
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**VOR-A**

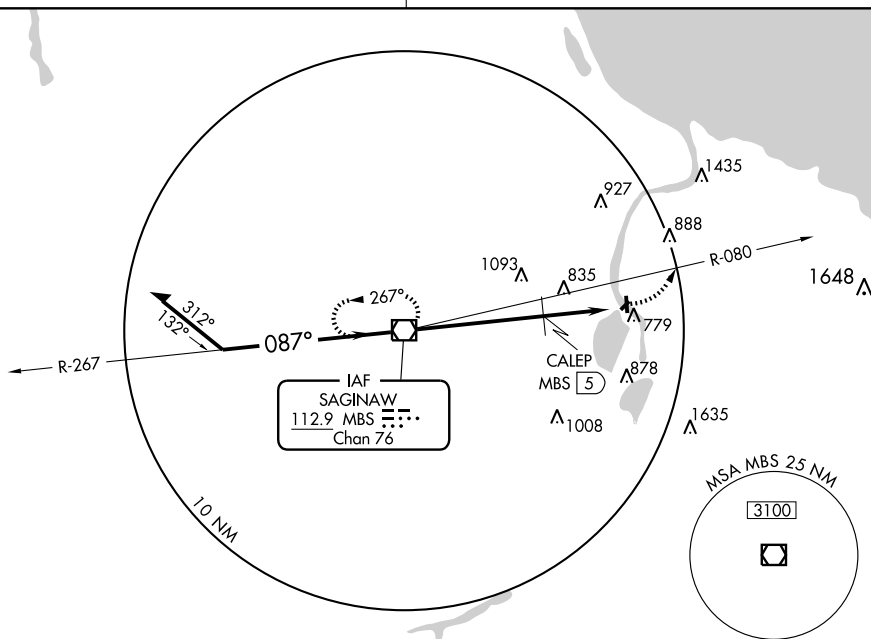
BAY CITY/JAMES CLEMENTS MUNI (3CM)

▼ Use Saginaw altimeter setting.  
 ▲ NA Circling not authorized southeast of Rwy 23 and 36.

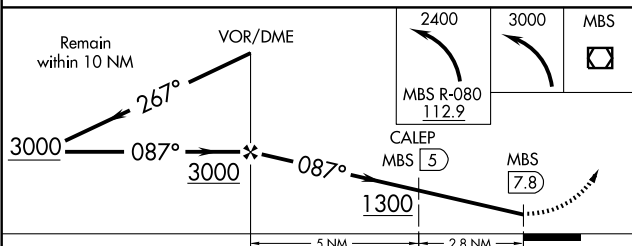
MISSED APPROACH: Climbing left turn to 2400  
 via MBS R-080 outbound then climbing left turn  
 to 3000 direct MBS VOR/DME and hold.

SAGINAW APP CON ★  
**120.95 235.625**

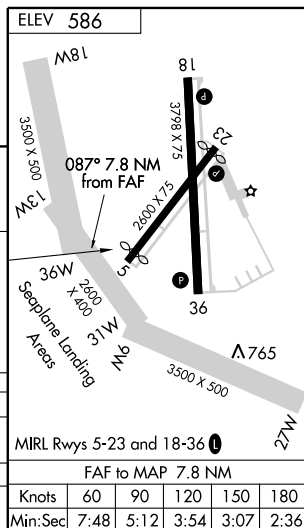
UNICOM  
**122.8 (CTAF) 0**



CAUTION: Tall vessels may be in the approach areas to Rwy 5 and 36.



CATEGORY	A	B	C	D
CIRCLING	1300-1	714 (800-1)	1300-2 714 (800-2)	NA
DME MINIMUMS				
CIRCLING	1120-1 534 (600-1)	1180-1 594 (600-1)	1180-1½ 594 (600-1½)	NA



## BAY CITY

JAMES CLEMENTS MUNI (3CM) 3 S UTC-5(-4DT) N43°32.82' W83°53.73'

DETROIT

L-28J, 31C

IAP

585 B FUEL 100LL LRA NOTAM FILE LAN

RWY 18-36: H3798X75 (ASPH) MIRL

RWY 18: PAPI(P4L)—GA 4.0° TCH 27'. Trees.

RWY 36: PAPI(P4L)—GA 4.0° TCH 27'. Trees.

RWY 05-23: H2600X75 (ASPH) MIRL

RWY 05: Thld dsplcd 226' Trees.

RWY 23: PAPI(P2L)—GA 4.0° TCH 27'. Thld dsplcd 159'. Road.

**AIRPORT REMARKS:** Attended 1300Z±—dusk. Occasional seaplane and agriculture ops; aerobatic maneuvers and skydiving activity at arpt. Ultralight activity on and invof arpt. Numerous sea gulls and deer on and invof arpt. Rwy 05 and Rwy 36, occasional +100' high ships traversing apch surfaces during navigable seasons 600-800' from thlds. Ship buoys in river channel. Rwy 05-23 twys marked with reflectors. ACTIVATE MIRL Rwy 18-36 and Rwy 05-23, PAPI Rwys 23, 18, and 36—CTAF.

COMMUNICATIONS: CTAF/UNICOM 122.8

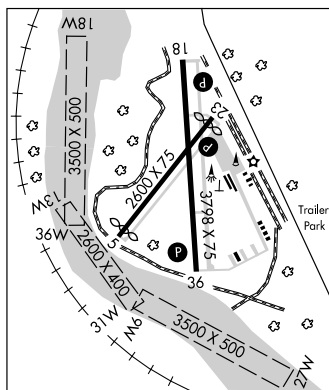
④ SAGINAW APP/DEP CON 120.95 (1100-0400Z±)

CLEVELAND CENTER APP/DEP CON 127.7 (0400-1100Z±)

RADIO AIDS TO NAVIGATION: NOTAM FILE MBS.

SAGINAW (L) VORW/DME 112.9 MBS Chan 76 N43°31.90'

W84°04.64' 086° 8 NM to fld. 663/3W. HIWAS.



WATERWAY 09-27: 3500X500 (WATER)

WATERWAY 18-36: 3500X500 (WATER)

WATERWAY 13-31: 2600X400 (WATER)

SEAPLANE REMARKS: No docks or ramps. Ship buoys in river channel.

## BEAVER ISLAND

BEAVER ISLAND (SJX) 4 SW UTC-5(-4DT) N45°41.54' W85°34.00'

GREEN BAY

L-31B

IAP

669 B FUEL 100LL NOTAM FILE SJX

RWY 09-27: H4300X75 (ASPH) MIRL

RWY 09: REIL. PAPI(P4L)—GA 3.0° TCH 24'. Trees.

RWY 27: REIL. PAPI(P4L)—GA 4.0° TCH 32'. Road.

RWY 14-32: 3300X120 (TURF)

RWY 14: Thld dsplcd 533'. Trees.

RWY 32: Thld dsplcd 600'. Trees.

RWY 05-23: 2130X120 (TURF)

RWY 05: Trees.

RWY 23: Thld dsplcd 794'. Trees.

**AIRPORT REMARKS:** Attended 1300-2200Z±. Rwy 05-23 and 14-32 CLOSED Nov thru Apr and when snow covered.

Deer on and invof arpt. Rwy 09-27 quarry, dirt piles, equipment 165' N of rwy, 150' W of Rwy 17-35. Rwy 17-35, equipment parked along E side of rwy, S end. Rwy 17, - 20' drop off, N end of rwy. Rwy 14-32 marked with 3' cones; Rwy 23 and Rwy 14-32 dsplcd thlds marked with three 3' yellow cones each side. ACTIVATE MIRL Rwy 09-27—CTAF.

WEATHER DATA SOURCES: AWOS-3 118.075 (231) 448-3081.

COMMUNICATIONS: CTAF/UNICOM 122.8

④ MINNEAPOLIS CENTER APP/DEP CON 134.6

RADIO AIDS TO NAVIGATION: NOTAM FILE PLN.

PELLSTON (L) VORTACW 111.8 PLN Chan 55 N45°37.84' W84°39.85' 282° 38.2 NM to fld. 840/6W.

HIWAS.

ST JAMES NDB (MHW) 382 SJX N45°41.60' W85°33.50' at fld. NOTAM FILE SJX. Unmonitored.

WELKE (6Y8) 2 S UTC-5(-4DT) N45°43.27' W85°31.22'

GREEN BAY

664 S4 FUEL 100LL NOTAM FILE LAN

RWY 17-35: 3500X140 (TURF)

RWY 17: Tree. RWY 35: Thld dsplcd 1350'. Trees.

RWY 09-27: H2512X30 (ASPH)

RWY 09: Thld dsplcd 450'. Trees.

RWY 27: Thld dsplcd 240'. Trees.

**AIRPORT REMARKS:** Attended continuously. Deer on and invof arpt. Rwy 27 a/cd parked in primary sfc south side. Rwy 17 rolling terrain, rough with bare spots. LIRL Rwy 09-27 not for public use; without prior approval call 231-448-2071 or 231-448-2374. LIRL located 72' from pavement edge each side. Rwy 17-35 marked with 3' yellow cones; Rwy 35 dsplcd thld marked with yellow cones and reflectors each side.

COMMUNICATIONS: CTAF/UNICOM 122.8

NDB SJX  
382

APP CRS  
280°

Rwy Idg	<b>4300</b>
TDZE	<b>669</b>
Apt Elev	<b>669</b>

NDB RWY 27  
BEAVER ISLAND (SJX)



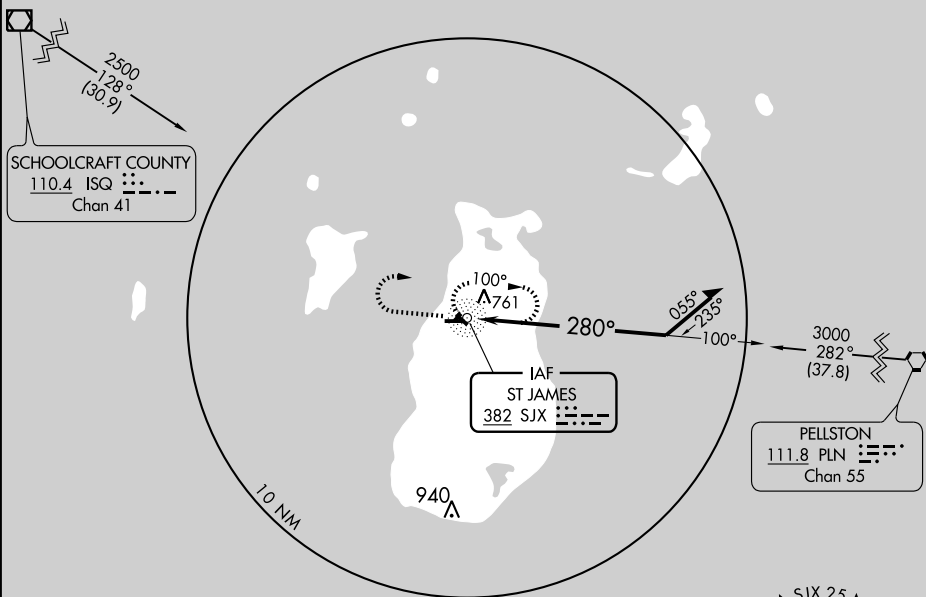
When local altimeter setting not received, use Pellston altimeter setting and increase all MDA 100 feet.

**MISSED APPROACH:** Climb to 2400 then right turn direct SJX NDB and hold.

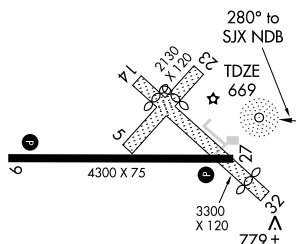
AWOS-3  
**118.075**

MINNEAPOLIS CENTER  
134.6 354.05

UNICOM  
122.8 (CTAF) **L**



ELEV 669

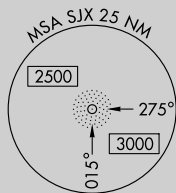


240C



SJX

382



Remain  
within 10 NM

NDB

$100^\circ$   
 $280^\circ$

MIRL Rwy 9-27 **L**  
REIL Rwy 9 and 27 **L**

CATEGORY	A	B	C	D
S-27	1140-1	471 (500-1)		NA
CIRCLING	1140-1	471 (500-1)		NA

BEAVER ISLAND, MICHIGAN  
Amdt 1 09295

45°41'N-85°34'W

BEAVER ISLAND (SJX)  
NDB RWY 27

EC-1. 23 SEP 2010 to 21 OCT 2010

APP CRS	Rwy Idg	<b>4300</b>
<b>275°</b>	TDZE	<b>669</b>
	Apt Elev	<b>669</b>

# RNAV (GPS) RWY 27

BEAVER ISLAND (SJX)

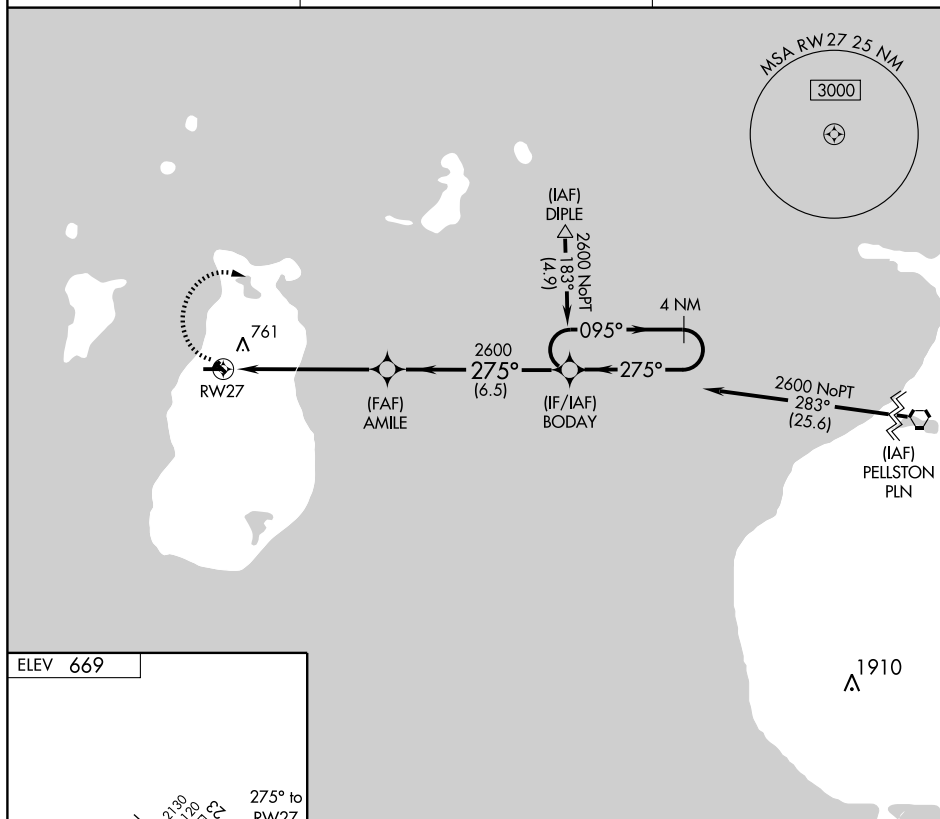
**▽**  
**▲** DME/DME RNP -0.3 NA. When local altimeter setting not received, use Pellston altimeter setting and increase all MDA 100 feet. VDP NA when using Pellston altimeter setting.

MISSED APPROACH: Climbing right turn to 2600 direct BODAY and hold.

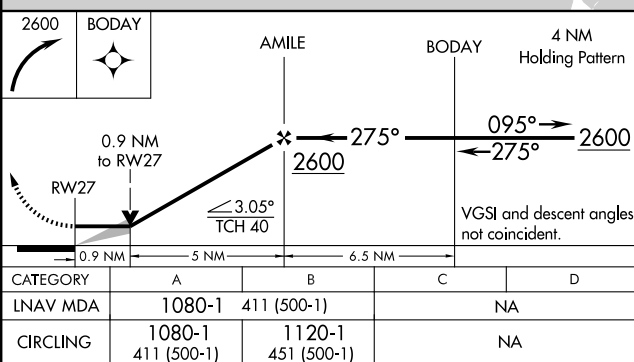
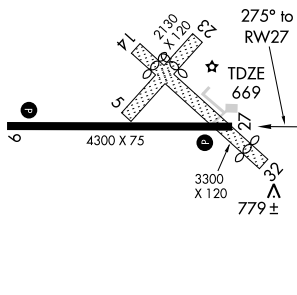
AWOS-3  
**118.075**

MINNEAPOLIS CENTER  
**134.6 354.05**

UNICOM  
**122.8 (CTAF) 0**



ELEV **669**



MIRL Rwy 9-27 **0**  
REIL Rwy 9 and 27 **0**

## BELLAIRES

**ANTRIM CO** (ACB) 1 NE UTC-5(-4DT) N44°59.32' W85°11.90'

623 B **FUEL** 100LL, JET A NOTAM FILE ACB

**RWY 02-20:** H5000X100 (ASPH) S-38, D-55 MIRL

**RWY 02:** REIL. PAPI(P2L)—GA 3.0° TCH 42'. Tree.

**RWY 20:** REIL. PAPI(P2L)—GA 3.25° TCH 45'. Trees.

**AIRPORT REMARKS:** Attended Jun-Sep 1300-2300Z†, Oct-May 1200-2200Z†. For fuel other times call 231-536-7017. For acft maintenance repairs call 1-800-959-1829. Snow removal equipment on rwy and twy during winter months. Birds on and in/ov arpt. MIRL Rwy 02-20 preset, to increase ints and ACTIVATE REIL Rwy 02-20—CTAF. Ldg fee applies to turbine and jet engine acft; waived with 100 gallon fuel purchase.

**WEATHER DATA SOURCES:** AWOS-3 119.275 (231) 533-8941.

**COMMUNICATIONS:** CTAF/UNICOM 122.7

Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 132.9

**GCO** 121.725 (MINNEAPOLIS CENTER CLNC and FLIGHT SERVICES)

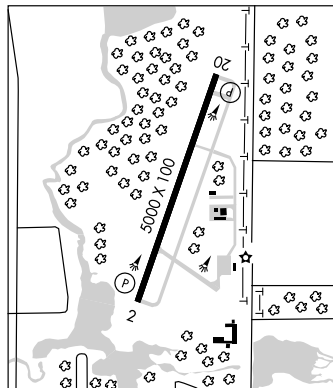
**RADIO AIDS TO NAVIGATION:** NOTAM FILE TVC.

**TRAVERSE CITY (H) VORTACW** 114.6 TVC Chan 93 N44°40.07'

W85°33.00' 040° 24.4 NM to fld. 912/2W. **HIWAS.**

**CLAM LAKE NDB (MHW)** 251 CXK N44°53.96' W85°14.38'

023° 5.6 NM to fld. NOTAM FILE ACB. Unmonitored.



**GREEN BAY**  
H-2L, L-31B  
IAP

**BELLEVILLE** (43G) 3 SW UTC-5(-4DT) N42°10.60' W83°32.75'

696 S4 **FUEL** 100LL NOTAM FILE LAN

**RWY 15-33:** 2253X80 (TURF)

**RWY 15:** Fence. Thld dsplcd 853'. Rgt tfc.

**RWY 33:** Thld dsplcd 600'. Road.

**RWY 18-36:** 2157X160 (TURF) (LOCAL USE ONLY)

**RWY 18:** Trees. Rgt tfc.

**RWY 36:** Road.

**AIRPORT REMARKS:** Attended 1300-2200Z†. Rwy 18-36 local use only—displacements not marked. Rwy soft during thawing season. Winter ops verify rwy/snow conditions. Rwy 15-33 thlds and dsplcd thlds marked with cones.

**COMMUNICATIONS:** CTAF 122.9

**DETROIT**  
**COPTER**

WAAS CH <b>56301</b> <b>W02A</b>	APP CRS <b>022°</b>	Rwy Idg <b>5000</b> TDZE <b>623</b> Apt Elev <b>623</b>
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## RNAV (GPS) RWY 2

BELLARE / ANTRIM COUNTY (ACB)

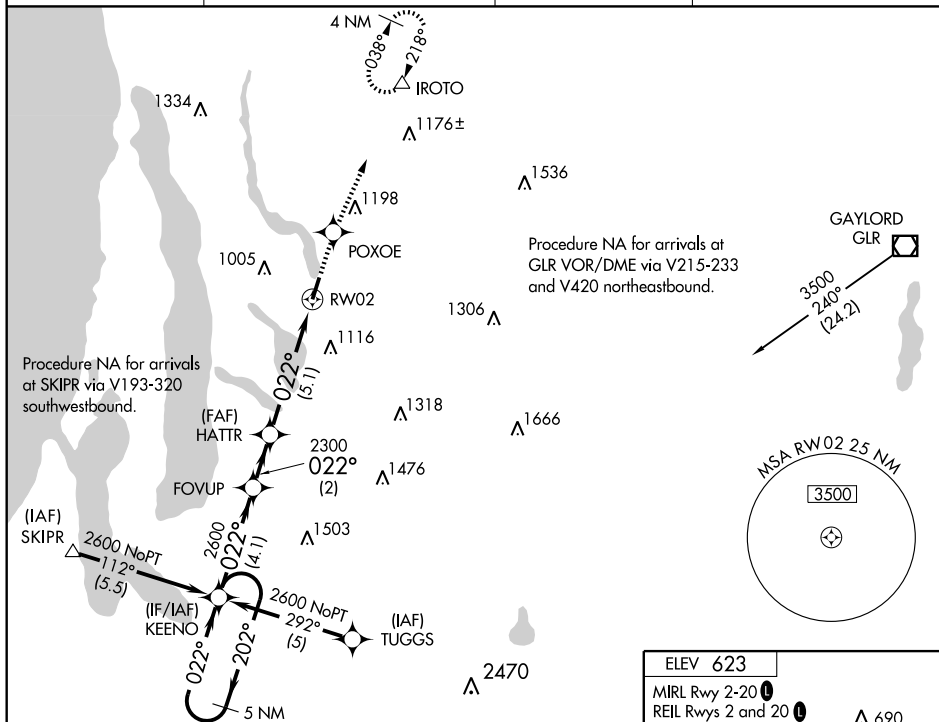
**T** If local altimeter setting not received, use Cherry Capital altimeter setting and increase all DAs/MDAs 60 feet. VDP NA when using Cherry Capital altimeter setting. DME/DME RNP-0.3 NA.

**MISSED APPROACH:** Climb to 3000 direct  
POXOE and via 030° track to IROTO and hold.

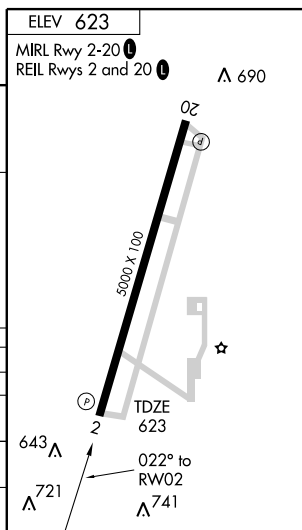
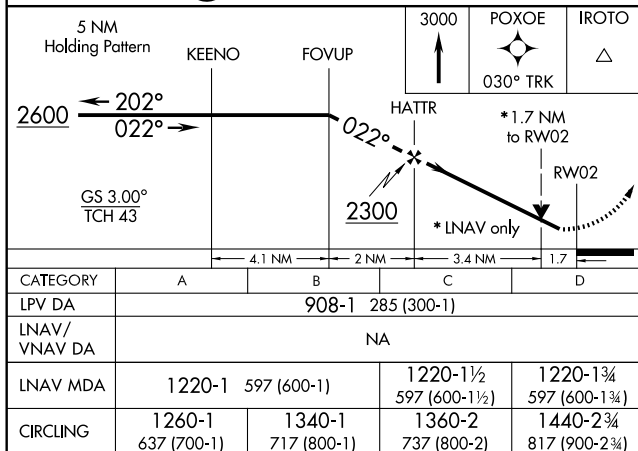
AWOS-3  
119.275

MINNEAPOLIS CENTER  
132.9 338.3

GCO  
121.725

UNICOM  
122.7 (CTAF) **L**

EC-1. 23 SEP 2010 to 21 OCT 2010





VORTAC TVC <b><u>114.6</u></b> Chan <b>93</b>	APP CRS <b>041°</b>	Rwy Idg <b>5000</b> TDZE <b>623</b> Apt Elev <b>623</b>
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APP CRS  
041°

Rwy Idg	<b>5000</b>
TDZE	<b>623</b>
Apt Elev	<b>623</b>

VOR RWY 2

BELLAIRES / ANTRIM COUNTY (ACB)

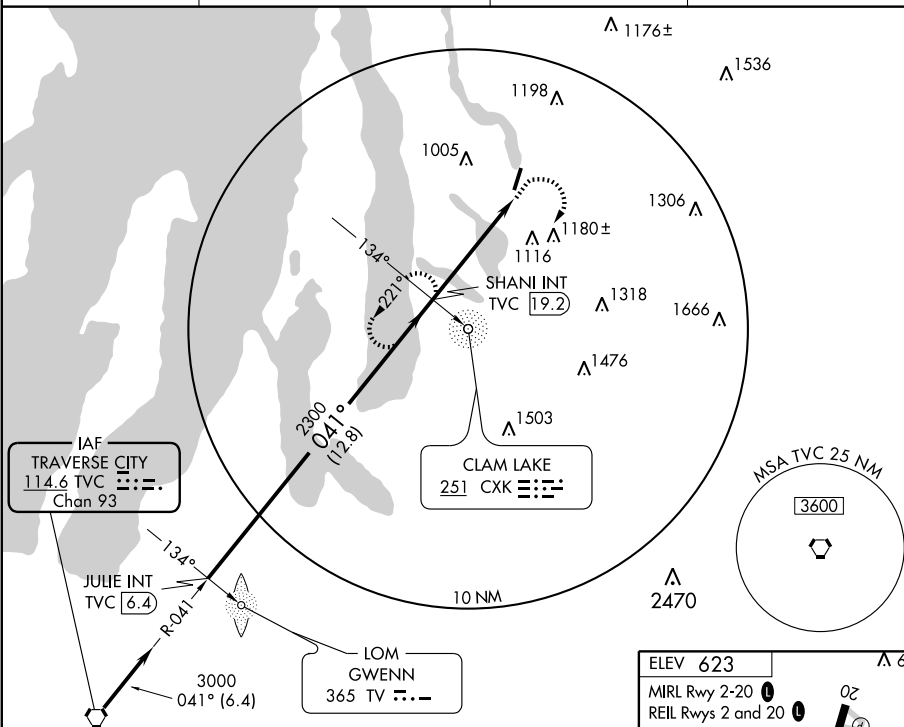


**MISSED APPROACH:** Climbing right turn to 2700  
via TVC R-041 to SHAN Int/19.2 DME and hold.

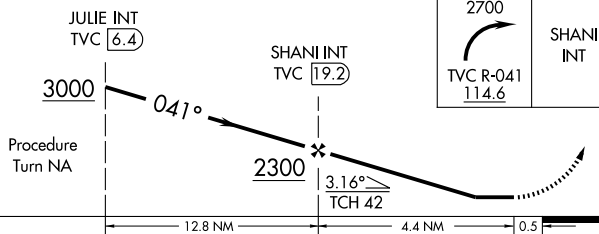
AWOS-3  
119.275

MINNEAPOLIS CENTER  
132.9 338.3

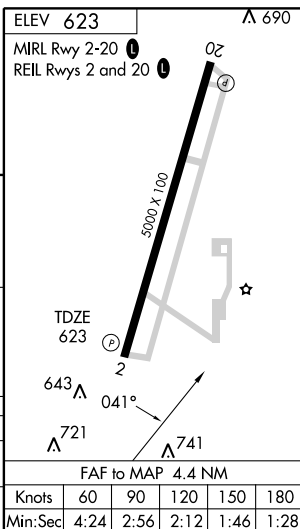
GCO  
121.725

UNICOM  
122.7 (CTAF) **L**

## DME or ADF REQUIRED



CATEGORY	A	B	C	D
S-2	1540-1¼ 917 (1000-1¼)		1540-2¾ 917 (1000-2¾)	1540-3 917(1000-3)
CIRCLING	1540-1¼ 917 (1000-1¼)		1540-2¾ 917 (1000-2¾)	1540-3 917 (1000-3)



BELLAIRE, MICHIGAN  
Amdt 2A 06215

BELLAIRe / ANTRIM COUNTY (ACB)

VOR RWY 2

44°59'N - 85°12'W

EC-1. 23 SEP 2010 to 21 OCT 2010

**EC-1, 23 SEP 2010 to 21 OCT 2010**

**BENTON HARBOR****SOUTHWEST MICHIGAN RGNL** (BEH) 2 NE UTC-5(-4DT) N42°07.72' W86°25.71'**CHICAGO**

643 B S4 FUEL 100LL, JET A1+ OX 3 NOTAM FILE BEH

H-5E, 10F, L-281

RWY 09-27: H5107X100 (ASPH-GRVD) S-60, D-100, 2D-100 HIRL 0.3% up E

IAP

RWY 09: REIL. VASI(V4L)—GA 3.0° TCH 44'.

RWY 27: MALSR. Thld dspcd 571'. Trees.

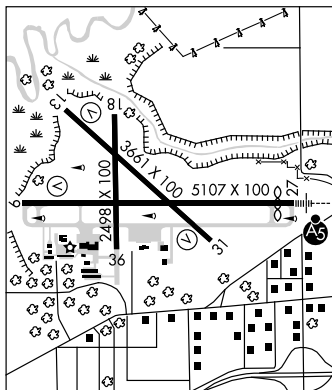
RWY 13-31: H3661X100 (ASPH) S-30, D-45 MIRL

RWY 13: REIL. VASI(V4L)—GA 3.5° TCH 45'.

RWY 31: REIL. VASI(V4L)—GA 4.0° TCH 41'. Trees.

RWY 18-36: H2498X100 (ASPH) S-16 MIRL

**AIRPORT REMARKS:** Attended Sat-Sun 1200-2100Z†, May-Oct Mon-Fri 1200-0100Z†, Nov-Apr Mon-Fri 1200-2300Z†. For attendant other times call 269-545-3535, 269-757-1634, Call-in fee. For svc after hrs call 269-325-7529. Call-in fee. Rwy 09 +38' lighted ILS antenna, 152' from rwy end, 300' right. Rwy 13 and Rwy 18 drop off begins 90' from paved sfc, Rwy 09 drop off begins 110' from thld. Birds and deer on and invof arpt. Snow removal ops in progress winter months; vehicle operators will monitor CTAF. Acft arriving/departing Benton Harbor announce intentions on CTAF. Rwy 18-36 pavement cracking. ACTIVATE HIRL Rwy 09-27, MIRL Rws 13-31 and 18-36; MALSR Rwy 27; REIL Rwy 09, Rwy 13 and Rwy 31—CTAF. Ldg fee for all multi-engine acft and commercial single engine acft waived with minimum fuel purchase.

**WEATHER DATA SOURCES:** ASOS 121.55 (269) 925-9008**COMMUNICATIONS:** CTAF/UNICOM 123.0

KEELER RCO 122.1R 116.6T (LANSING RADIO)

Ⓡ **SOUTH BEND APP/DEP CON** 118.55 (Sun-Fri 1030-0500Z, Sat 1030-0445Z), other times ctc

Ⓡ **CHICAGO CENTER APP/DEP CON** 127.55

SOUTH BEND CLNC DEL 119.7

**AIRSPACE:** CLASS E svc 1100-0430Z† other times CLASS G.**RADIO AIDS TO NAVIGATION:** NOTAM FILE LAN.

KEELER (L) VOR/DME 116.6 ELX Chan 113 N42°08.66' W86°07.36' 266° 13.7 NM to fld. 795/00E.

MALLY NDB (LOM) 397 BE N42°07.61' W86°18.80' 274° 5.1 NM to fld. Unmonitored.

ILS 108.5 I-BEH Rwy 27. LOM MALLY NDB. Unmonitored. LOC unusable byd 20° left of course and byd 16 NM.

**BERRIEN SPRINGS** N41°57.10' W86°22.06'**CHICAGO**

RCO 121.625 (LANSING RADIO)

L-281

**BERRIEN SPRINGS****ANDREWS UNIVERSITY AIRPARK** (C20) 2 W UTC-5(-4DT) N41°57.06' W86°22.08'**CHICAGO**

668 B S4 FUEL 100LL NOTAM FILE LAN

L-281

RWY 13-31: H4160X75 (ASPH) LIRL (NSTD)

IAP

RWY 13: Brush. Rgt tfc.

RWY 31: Thld dspcd 1140'. Trees.

RWY 03-21: 1944X115 (TURF) (LOCAL USE ONLY)

RWY 03: Thld dspcd 613'. Trees.

RWY 21: Thld dspcd 550'. Trees. Rgt tfc.

**AIRPORT REMARKS:** Attended Sun-Fri 1300-2200Z†. Svcs avbl Sun-Fri only. Fuel 24 hour self svc. Rwy 31 NSTD LIRL due to dspcd thld not lighted. Last 3,021' is lighted. ACTIVATE LIRL Rwy 13-31—CTAF.

**COMMUNICATIONS:** CTAF/UNICOM 122.7

BERRIEN SPRINGS RCO 121.625 (LANSING RADIO)

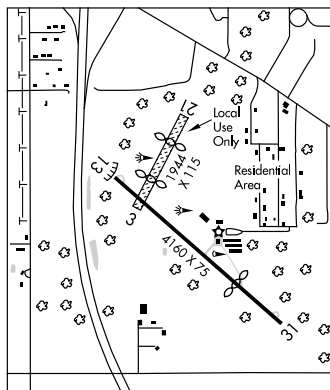
Ⓡ **SOUTH BEND APP/DEP CON** 118.55 (Sun-Fri 1030-0500Z, Sat 1030-0445Z), other times ctc

Ⓡ **CHICAGO CENTER APP/DEP CON** 127.55

**RADIO AIDS TO NAVIGATION:** NOTAM FILE LAN.

GIPPER (H) VORTACW 115.4 GIJ Chan 101 N41°46.12' W86°19.11' 349° 11.2 NM to fld. 804/00E.

HIWAS.



LOC I-BEH <b>108.5</b>	APP CRS <b>273°</b>	Rwy Idg TDZE Apt Elev	<b>4536</b> <b>637</b> <b>643</b>
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**ILS RWY 27**

BENTON HARBOR/SOUTHWEST MICHIGAN RGNL (BEH)

▼ LOC unusable beyond 20° left of course.  
Cats A and B S-LOC 27 visibility increased ¼ mile  
for inoperative MALSR.  
S-ILS 27 inoperative table does not apply.

MALSR  
A5

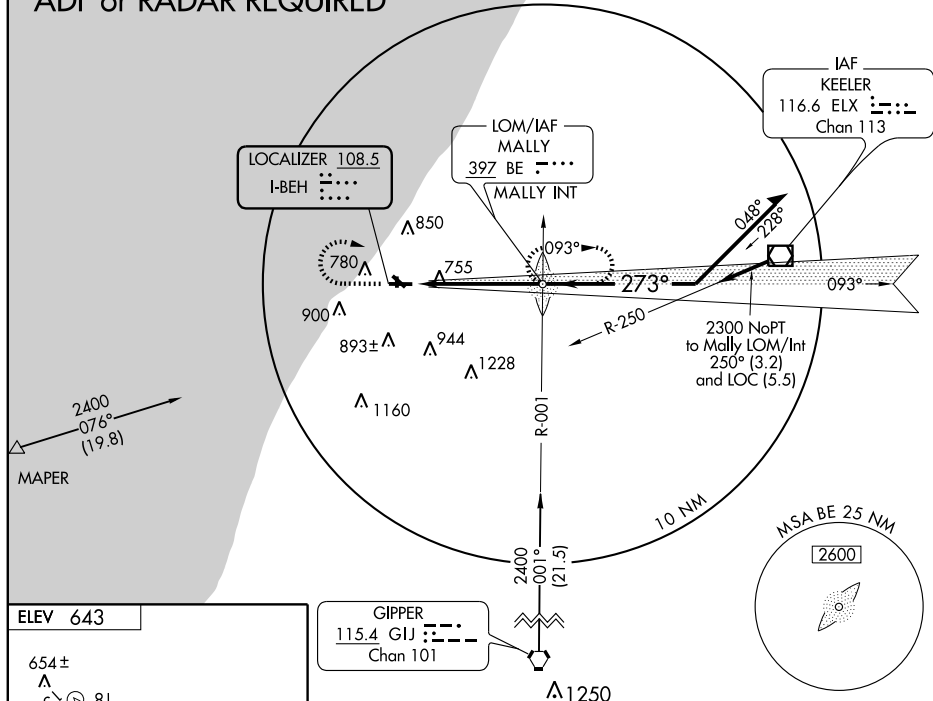
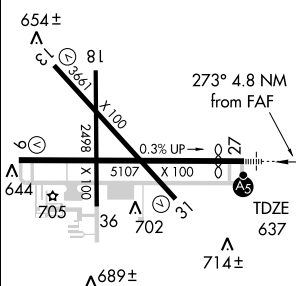
MISSED APPROACH: Climb to 2400, then  
right turn direct MALLY LOM and hold.

ASOS  
**121.55**

SOUTH BEND APP CON\*  
**118.55 257.8**

SOUTH BEND CLNC DEL  
**119.7**

UNICOM  
**123.0** (CTAF) **1**

**ADF or RADAR REQUIRED****ELEV 643**

REIL Rws 9, 13 and 31  
MIRL Rws 13-31 and 18-36  
HIRL Rwy 9-27

FAF to MAP 4.8 NM					
Knots	60	90	120	150	180
Min:Sec	4:48	3:12	2:24	1:55	1:36

BENTON HARBOR, MICHIGAN

Amdt 6E 08325

BENTON HARBOR/SOUTHWEST MICHIGAN RGNL (BEH)

42°08'N - 86°26'W

**ILS RWY 27**

LOC I-BEH	APP CRS	Rwy Idg	5107
<u>108.5</u>	<u>093°</u>	TDZE	630
		Apt Elev	643

LOC BC RWY 9

BENTON HARBOR/ SOUTHWEST MICHIGAN RGNL (BEH)

**T**  
**A** NA

**MISSED APPROACH:** Climb to 2400 direct ELX VOR/DME and hold.

ASOS  
121.55

**SOUTH BEND APP CON★**  
**118.55 257.8**

SOUTH BEND CLNC DEL  
**119.7**

UNICOM  
123.0 (CTAF) **L**

## BACK COURSE

LOCALIZER 10  
I-BEH  $\ddot{\div} \cdots$

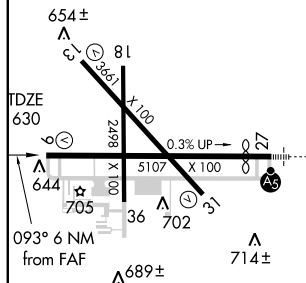
— IAF —  
KEELER  
6 ELX :—::  
Chan 113

2600 to  
DUPRE INT  
267° (20)

R-086

LOM  
MALLY  
397 BE . . .

ELEV 643



REIL Rwy 9, 13 and 31 **L**  
MIRL Rwy 13-31 and 18-36 **L**  
HIRL Rwy 9-27 **L**

FAF to MAP 5.5 NM					
Knots	60	90	120	150	180
Min:Sec	5:30	3:40	2:45	2:12	1:50

BENTON HARBOR, MICHIGAN  
Amdt 9A 09351

Remain within 10 NM

2600

27°

093°

2600

DUPRE INT ELX (20)

Disregard glide slope indications.

3.0



2400	ELX
	
	116.6

Diagram of a rectangular plate with a width of 5.5 NM and a height of 0.5.

CATEGORY	A	B	C	D
S-9	1040-1	410 (400-1)	1040-1¼	410 (400-1¼)
CIRCLING	1140-1 497 (500-1)	1160-1 517 (600-1)	1160-1½ 517 (600-1½)	1200-2 557 (600-2)

BENTON HARBOR/SOUTHWEST MICHIGAN RGNL (BEH)  
42°08'N - 86°26'W LOC BC PWY 9

LOC BC RWY 9

**EC-1, 23 SEP 2010 to 21 OCT 2010**

EC-1. 23 SEP 2010 to 21 OCT 2010

LOM BE <b>397</b>	APP CRS <b>274°</b>	Rwy Idg TDZE Apt Elev	<b>4536</b> <b>637</b> <b>643</b>
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**NDB or GPS RWY 27**

BENTON HARBOR/SOUTHWEST MICHIGAN RGNL (BEH)



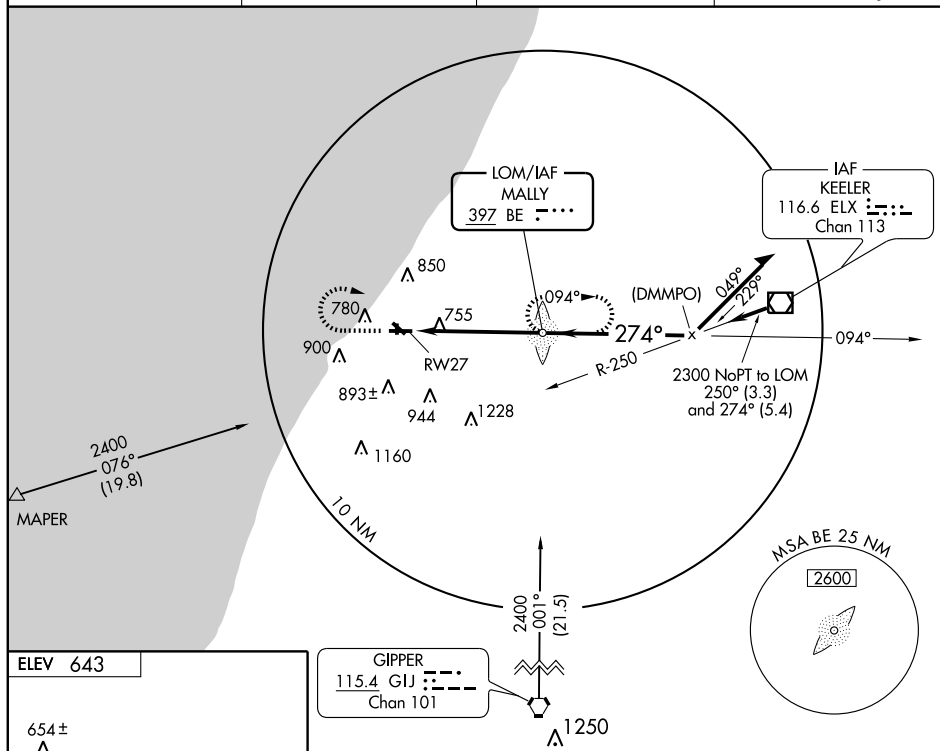
MISSED APPROACH: Climb to 2400 then right turn  
direct BE LOM and hold.

ASOS  
**121.55**

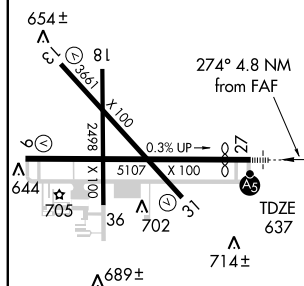
SOUTH BEND APP CON ★  
**118.55 257.8**

SOUTH BEND CLNC DEL  
**119.7**

UNICOM  
**123.0 (CTAF) 1**



ELEV 643



REIL Rwy 9, 13 and 31

MIRL Rwy 13-31 and 18-36

HIRL Rwy 9-27

FAF to MAP 4.8 NM

Knots	60	90	120	150	180
Min:Sec	4:48	3:12	2:24	1:55	1:36

BENTON HARBOR, MICHIGAN

Amdt 9B 08325

BENTON HARBOR/SOUTHWEST MICHIGAN RGNL (BEH)

42°08'N - 86°26'W

**NDB or GPS RWY 27**

WAAS CH <b>86912</b> <b>W09A</b>	APP CRS <b>093°</b>	Rwy Idg <b>5107</b> TDZE <b>630</b> Apt Elev <b>643</b>
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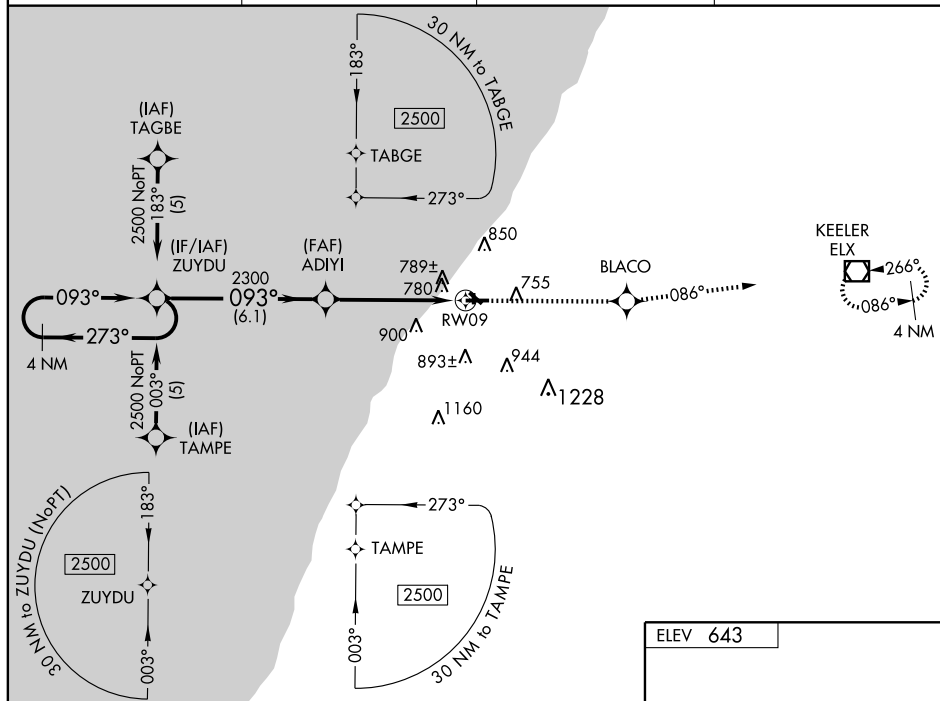
## RNAV (GPS) RWY 9

BENTON HARBOR/SOUTHWEST MICHIGAN RGNL (BEH)

▼ Baro-VNAV NA when using South Haven altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F).  
 ▲ DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use South Haven altimeter setting and increase all DA/MDA 40 feet and LPV all Cats visibility ¼ mile and LNAV Cat D visibility ¼ mile.

MISSED APPROACH: Climb to 2400 direct BLACO and via 086° track to ELX VOR/DME and hold.

ASOS <b>121.55</b>	SOUTH BEND APP CON ★ <b>118.55 257.8</b>	SOUTH BEND CLNC DEL <b>119.7</b>	UNICOM <b>123.0 (CTAF) 0</b>
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4 NM Holding Pattern ZUYDU VGS1 and RNAV glidepath not coincident. 2500 ← 273° / 093° → GS 3.00° TCH 55 2300 6.1 NM 5 NM RW09 BLACO ELX 2400 086° TRK 116.6 654± TDZE 630 2498 0.3% UP 705 36 5107 702 689± 714± 093° to RW09 REIL Rwy 9, 13 and 31 MRL Rwy 13-31 and 18-36 HIRL Rwy 9-27				
CATEGORY	A	B	C	D
LPV DA	1019-1¼		389 (400-1¼)	
LNAV/VNAV DA	1101-1¾		471 (500-1¾)	
LNAV MDA	1040-1	410 (500-1)	1040-1¼	410 (500-1¼)
CIRCLING	1120-1	477 (500-1)	1160-1½ 517 (600-1½)	1200-2 557 (600-2)

BENTON HARBOR, MICHIGAN

Orig 09127

BENTON HARBOR/SOUTHWEST MICHIGAN RGNL (BEH)

42°08'N - 86°26'W

RNAV (GPS) RWY 9


EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010

VOR/DME ELX <b>116.6</b> Chan <b>113</b>	APP CRS <b>086°</b>	Rwy Idg <b>5107</b> TDZE <b>630</b> Apt Elev <b>643</b>
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VOR RWY 9

BENTON HARBOR/SOUTHWEST MICHIGAN RGNL (BEH)

	Visibility reduction by helicopters NA. When local altimeter setting not received, use South Haven altimeter setting and increase all MDA 40 feet.
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**MISSED APPROACH:** Climb to 2400  
direct ELX VOR/DME and hold.

ASOS  
121.55

SOUTH BEND APP CON★	
118.55	257.8

SOUTH BEND CLNC DEL  
119.7

UNICOM  
123.0 (CTAF) **L**

MISSED APCH FIX

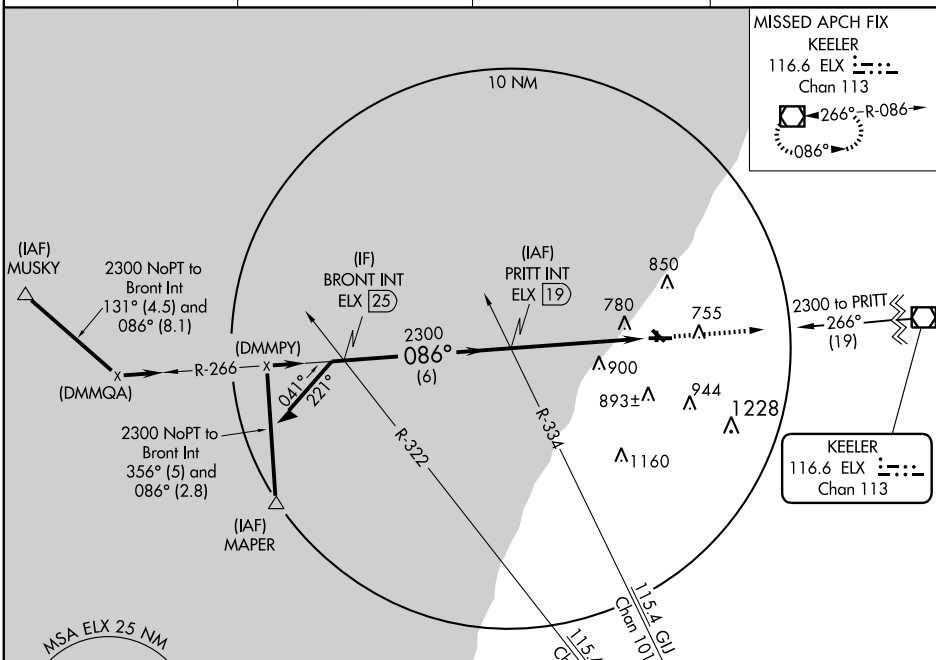
KEELER

116.6 ELX   
Chan 113

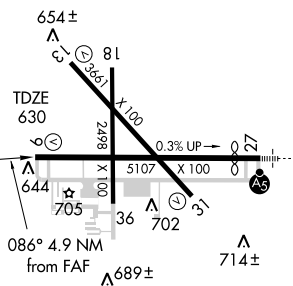
KEELER  
116.6 ELX :--::  
Chan 113

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1. 23 SEP 2010 to 21 OCT 2010



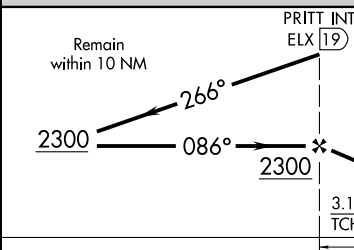
ELEV 643



REIL Rwys 9, 13 and 31 **L**  
MIRL Rwys 13-31 and 18-36 **L**  
HIRL Rwy 9-27 **L**

FAF to MAP 4.9 NM

Knots	60	90	120	150	180
Min:Sec	4:54	3:16	2:27	1:58	1:38



CATEGORY	A	B	C	D
S-9	1160-1	530 (600-1)	1160-1½ 530 (600-1½)	1160-1¾ 530 (600-1¾)
CIRCLING	1160-1	517 (600-1)	1160-1½ 517 (600-1½)	1200-2 557 (600-2)

BENTON HARBOR, MICHIGAN

Amdt 9 09127

BENTON HARBOR/SOUTHWEST MICHIGAN RGNL (BEH)

42°08'N - 86°26'W

VOR RWY 9

VOR/DME ELX  
**116.6**  
Chan **113**

APP CRS  
**266°**

Rwy Idg  
TDZE  
Apt Elev **643**

**VOR RWY 27**

BENTON HARBOR/SOUTHWEST MICHIGAN RGNL (BEH)



Cats A and B S-27 visibility increased ¼ mile for inoperative MALS.

MALS



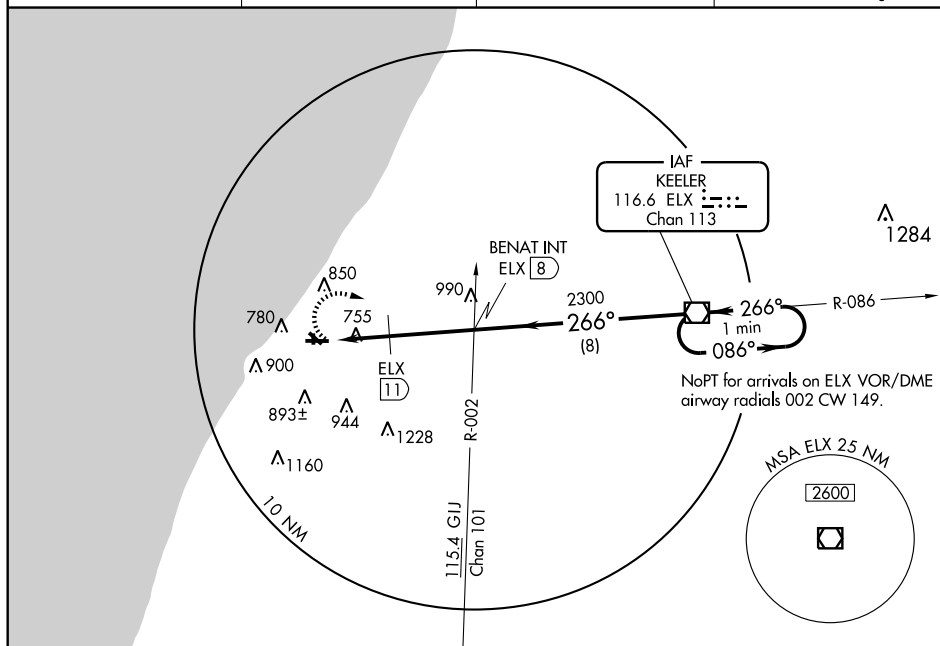
MISSED APPROACH: Climbing right turn to 2400 direct ELX VOR/DME and hold.

ASOS  
**121.55**

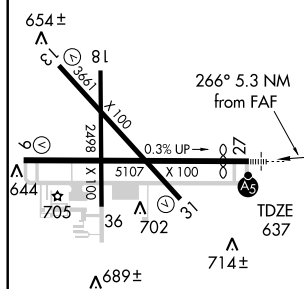
SOUTH BEND APP CON ★  
**118.55 257.8**

SOUTH BEND CLNC DEL  
**119.7**

UNICOM  
**123.0 (CTAF) ①**



ELEV 643



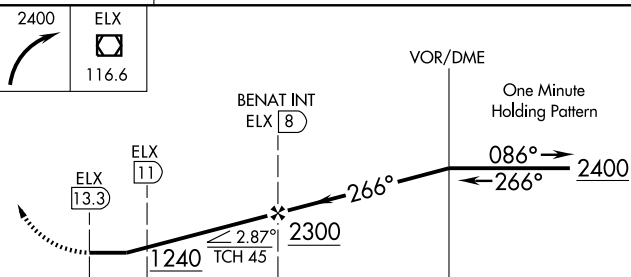
REIL Rwy 9, 13 and 31 ①  
MIRL Rwy 13-31 and 18-36 ①  
HIRL Rwy 9-27 ①

FAF to MAP 5.3 NM

Knots	60	90	120	150	180
Min:Sec	5:18	3:32	2:39	2:07	1:46

BENTON HARBOR, MICHIGAN

Amdt 18B 08325



CATEGORY	A	B	C	D
S-27	1240-¾ 603 (600-¾)	1240-1¼ 603 (600-1¼)	1240-1½ 603 (600-1½)	1240-2 597 (600-2)
CIRCLING	1240-1 597 (600-1)	1240-1¾ 597 (600-1¾)	1240-2 597 (600-2)	1240-2 597 (600-2)
DME MINIMUMS				
S-27	1120-¾ 483 (500-¾)	1120-1 483 (500-1)	1120-1 483 (500-1)	1120-2 557 (600-2)
CIRCLING	1140-1 497 (500-1)	1160-1 517 (600-1)	1160-1½ 517 (600-1½)	1160-2 557 (600-2)

BENTON HARBOR/SOUTHWEST MICHIGAN RGNL (BEH)

42°08'N - 86°26'W

**VOR RWY 27**



**BENTON HARBOR****SOUTHWEST MICHIGAN RGNL** (BEH) 2 NE UTC-5(-4DT) N42°07.72' W86°25.71'**CHICAGO**

643 B S4 FUEL 100LL, JET A1+ OX 3 NOTAM FILE BEH

H-5E, 10F, L-281

RWY 09-27: H5107X100 (ASPH-GRVD) S-60, D-100, 2D-100 HIRL 0.3% up E

IAP

RWY 09: REIL. VASI(V4L)—GA 3.0° TCH 44'.

RWY 27: MALSR. Thld dspcd 571'. Trees.

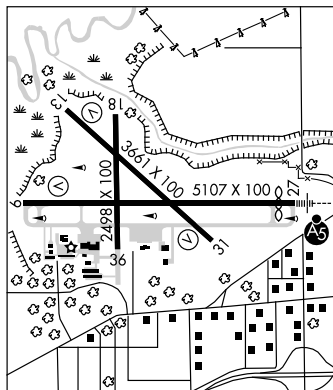
RWY 13-31: H3661X100 (ASPH) S-30, D-45 MIRL

RWY 13: REIL. VASI(V4L)—GA 3.5° TCH 45'.

RWY 31: REIL. VASI(V4L)—GA 4.0° TCH 41'. Trees.

RWY 18-36: H2498X100 (ASPH) S-16 MIRL

**AIRPORT REMARKS:** Attended Sat-Sun 1200-2100Z†, May-Oct Mon-Fri 1200-0100Z†, Nov-Apr Mon-Fri 1200-2300Z†. For attendant other times call 269-545-3535, 269-757-1634, Call-in fee. For svc after hrs call 269-325-7529. Call-in fee. Rwy 09 +38' lighted ILS antenna, 152' from rwy end, 300' right. Rwy 13 and Rwy 18 drop off begins 90' from paved sfc, Rwy 09 drop off begins 110' from thld. Birds and deer on and invof arpt. Snow removal ops in progress winter months; vehicle operators will monitor CTAF. Acft arriving/departing Benton Harbor announce intentions on CTAF. Rwy 18-36 pavement cracking. ACTIVATE HIRL Rwy 09-27, MIRL Rws 13-31 and 18-36; MALSR Rwy 27; REIL Rwy 09, Rwy 13 and Rwy 31—CTAF. Ldg fee for all multi-engine acft and commercial single engine acft waived with minimum fuel purchase.

**WEATHER DATA SOURCES:** ASOS 121.55 (269) 925-9008**COMMUNICATIONS:** CTAF/UNICOM 123.0

KEELER RCO 122.1R 116.6T (LANSING RADIO)

Ⓡ **SOUTH BEND APP/DEP CON** 118.55 (Sun-Fri 1030-0500Z, Sat 1030-0445Z), other times ctc

Ⓡ **CHICAGO CENTER APP/DEP CON** 127.55

SOUTH BEND CLNC DEL 119.7

**AIRSPACE:** CLASS E svc 1100-0430Z† other times CLASS G.**RADIO AIDS TO NAVIGATION:** NOTAM FILE LAN.

KEELER (L) VOR/DME 116.6 ELX Chan 113 N42°08.66' W86°07.36' 266° 13.7 NM to fld. 795/00E.

MALLY NDB (LOM) 397 BE N42°07.61' W86°18.80' 274° 5.1 NM to fld. Unmonitored.

ILS 108.5 I-BEH Rwy 27. LOM MALLY NDB. Unmonitored. LOC unusable byd 20° left of course and byd 16 NM.

**BERRIEN SPRINGS** N41°57.10' W86°22.06'**CHICAGO**

RCO 121.625 (LANSING RADIO)

L-281

**BERRIEN SPRINGS****ANDREWS UNIVERSITY AIRPARK** (C20) 2 W UTC-5(-4DT) N41°57.06' W86°22.08'**CHICAGO**

668 B S4 FUEL 100LL NOTAM FILE LAN

L-281

RWY 13-31: H4160X75 (ASPH) LIRL (NSTD)

IAP

RWY 13: Brush. Rgt tfc.

RWY 31: Thld dspcd 1140'. Trees.

RWY 03-21: 1944X115 (TURF) (LOCAL USE ONLY)

RWY 03: Thld dspcd 613'. Trees.

RWY 21: Thld dspcd 550'. Trees. Rgt tfc.

**AIRPORT REMARKS:** Attended Sun-Fri 1300-2200Z†. Svcs avbl Sun-Fri only. Fuel 24 hour self svc. Rwy 31 NSTD LIRL due to dspcd thld not lighted. Last 3,021' is lighted. ACTIVATE LIRL Rwy 13-31—CTAF.

**COMMUNICATIONS:** CTAF/UNICOM 122.7

BERRIEN SPRINGS RCO 121.625 (LANSING RADIO)

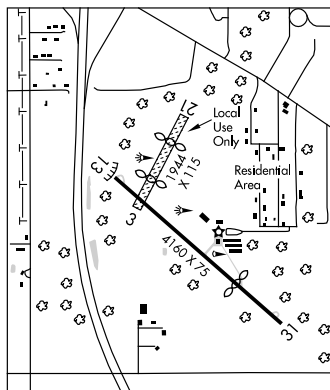
Ⓡ **SOUTH BEND APP/DEP CON** 118.55 (Sun-Fri 1030-0500Z, Sat 1030-0445Z), other times ctc

Ⓡ **CHICAGO CENTER APP/DEP CON** 127.55

**RADIO AIDS TO NAVIGATION:** NOTAM FILE LAN.

GIPPER (H) VORTACW 115.4 GIJ Chan 101 N41°46.12' W86°19.11' 349° 11.2 NM to fld. 804/00E.

HIWAS.



VOR/DME ELX <b>116.6</b> Chan <b>113</b>	APP CRS <b>224°</b>	Rwy Idg TDZE Apt Elev <b>N/A</b> <b>N/A</b> <b>668</b>
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**VOR-A**

BERRIEN SPRINGS / ANDREWS UNIVERSITY AIRPARK (C20)

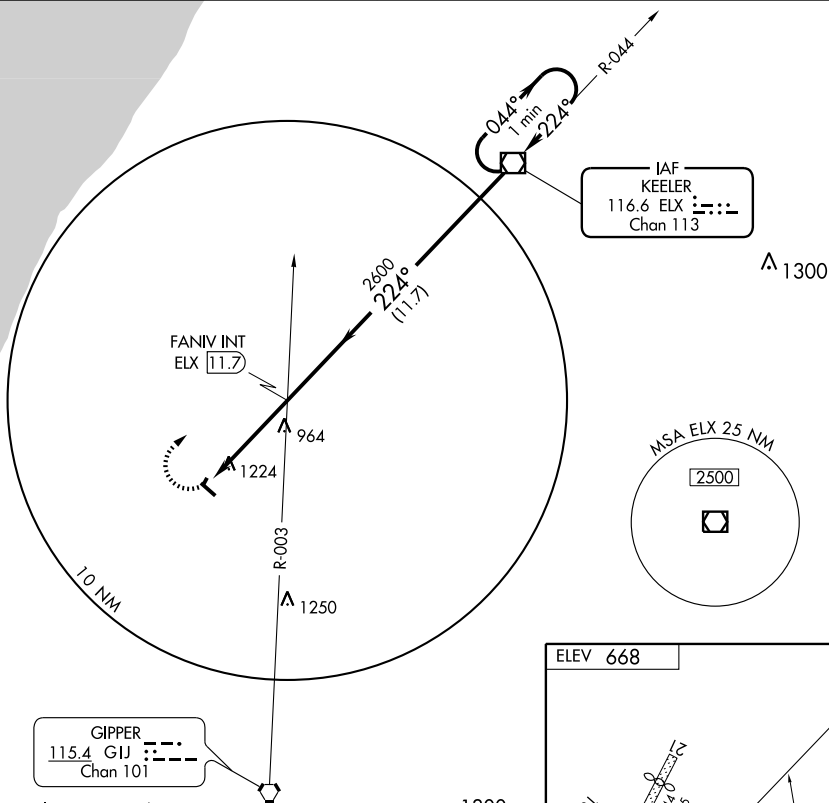


Use Benton Harbor altimeter setting.  
Procedure NA at night.

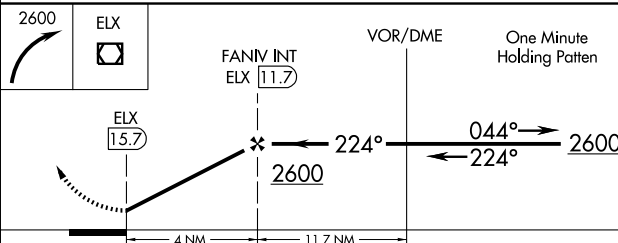
MISSED APPROACH: Climbing right turn  
to 2600 direct ELX VOR/DME and hold.

SOUTH BEND APP CON ★  
**118.55 257.8**

UNICOM  
**122.7** (CTAF) **0**

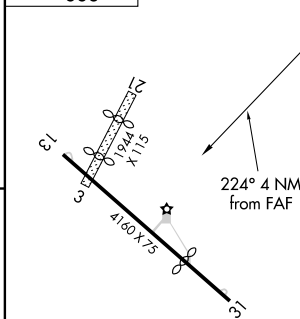


NoPT for Arrivals on ELX VOR/DME  
Airway Radials 002 clockwise 094.



CATEGORY	A	B	C	D
CIRCLING	1620-1¼ 952 (1000-1¼)	1620-1½ 952 (1000-1½)	NA	NA

ELEV 668

LIRL Rwy 13-31 **0**

FAF to MAP 4 NM					
Knots	60	90	120	150	180
Min:Sec	4:00	2:40	2:00	1:36	1:20

## BIG RAPIDS

ROBEN-HOOD (RQB) 2 NW UTC-5(-4DT) N43°43.36' W85°30.24'

CHICAGO

990 B S4 FUEL 100LL NOTAM FILE RQB

L-281

RWY 09-27: H4300X75 (ASPH) S-20 MIRL 1.0% up W

IAP

RWY 09: REIL PAPI(P2L)—GA 3.33° TCH 25'. Trees.

RWY 27: REIL. PAPI(P4L). Tree.

RWY 14-32: H2700X75 (ASPH) S-20 MIRL 0.3% up NW

RWY 14: Trees. RWY 32: Tree.

**AIRPORT REMARKS:** Attended Mon-Fri 1300-2200Z. 24 hr self serve fuel. Call in fee charged. Deer on and invof arpt. Rwy 14-32 extensive cracking. Ultralight activity on and invof arpt. Rwy 09 REIL OTS indef. ACTIVATE MIRL Rwy 09-27 and Rwy 14-32; PAPI Rwy 09 and Rwy 27; REIL Rwy 09 and Rwy 27—CTAF.

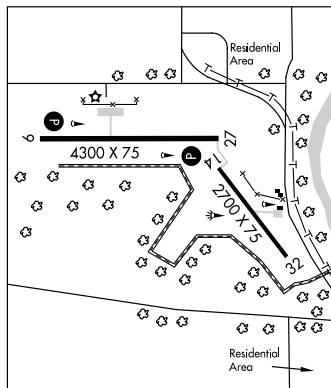
**WEATHER DATA SOURCES:** AWOS-3 121.125 (231) 796-0884.**COMMUNICATIONS:** CTAF/UNICOM 122.8

⑧ MINNEAPOLIS CENTER APP/DEP CON 120.85

**RADIO AIDS TO NAVIGATION:** NOTAM FILE LAN.

WHITE CLOUD (L) VOR/DME 117.6 HIC Chan 123 N43°34.49'

W85°42.97' 047° 12.8 NM to fld. 920/1W.



## BISHOP INTL (See FLINT)

## BLISSFIELD

BETZ (44G) 2 N UTC-5(-4DT) N41°51.34' W83°52.25'

DETROIT

691 FUEL 100LL NOTAM FILE LAN

COPTER

RWY 09-27: 2602X92 (TURF)

RWY 09: Thld dspcd 415'. Road.

RWY 27: Thld dspcd 390'. Road.

**AIRPORT REMARKS:** Unattended. Fuel avbl by prior arrangement; phone 517-499-4860. Rwy 09-3' ditch 10' from thld. To confirm snow conditions winter months call 517-499-4860. Rwy 09-27 NSTD LIRL on arpt not for public use; marked with white lgts. Rwy 09-27 thlds and dspcd thlds marked with cones.

**COMMUNICATIONS:** CTAF 122.9

BOIS BLANC ISLAND (6Y1) 3 NW UTC-5(-4DT) N45°45.98' W84°30.23'

LAKE HURON

664 B NOTAM FILE LAN

L-31C

RWY 10-28: H3498X75 (ASPH) MIRL

RWY 10: Thld dspcd 90'. Road.

RWY 28: REIL. PAPI(P4L)—GA 4.0° TCH 33'. Trees.

**AIRPORT REMARKS:** Unattended. 231-634-7123 manager residence, 231-634-7052 unattended arpt manager office phone at arpt, 231-634-7061 unattended arpt phone. Deer and birds on and invof arpt. ACTIVATE MIRL Rwy 10-28—CTAF.

**COMMUNICATIONS:** CTAF 122.9**RADIO AIDS TO NAVIGATION:** NOTAM FILE PLN.

PELLSTON (L) VORTACW 111.8 PLN Chan 55 N45°37.84' W84°39.85' 046° 10.6 NM to fld.

840/6W. HIWAS.

BOYNE CITY MUNI (N98) 1 SE UTC-5(-4DT) N45°12.50' W84°59.42'

GREEN BAY

657 FUEL 100LL NOTAM FILE LAN

L-31B

RWY 09-27: H4000X75 (ASPH) MIRL

RWY 09: PAPI(P2L)—GA 4.0° TCH 28'. Thld dspcd 600'. Road.

RWY 27: REIL. Trees.

**AIRPORT REMARKS:** Unattended. Self svc fuel. Deer and birds on and invof rwys. +4' fence parallel to rwy, 84' south of rwy centerline, +6' fence 122' north of rwy centerline. ACTIVATE MIRL Rwy 09-27, PAPI Rwy 09, REIL Rwy 27—122.9.

**COMMUNICATIONS:** CTAF/UNICOM 122.8**RADIO AIDS TO NAVIGATION:** NOTAM FILE PLN.

PELLSTON (L) VORTACW 111.8 PLN Chan 55 N45°37.84' W84°39.85' 215° 28.9 NM to fld. 840/6W. HIWAS.

APP CRS  
**275°**

Rwy Idg **4300**  
TDZE **977**  
Apt Elev **990**

# GPS RWY 27

BIG RAPIDS / ROBEN-HOOD (RQB)



NA

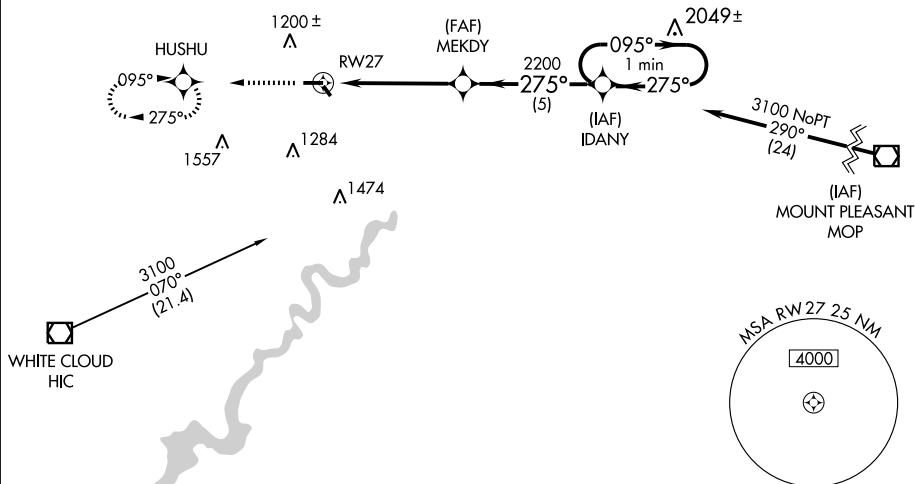
Obtain local altimeter setting on CTAF; when not received, use Muskegon altimeter setting.

MISSED APPROACH: Climb to 2900  
direct HUSHU WP and hold.

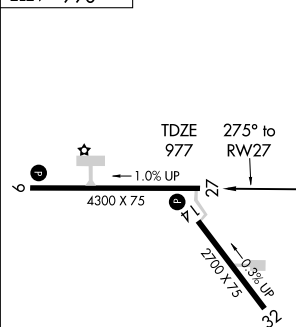
AWOS-3  
**121.125**

MINNEAPOLIS CENTER  
**120.85 322.35**

UNICOM  
**122.8 (CTAF) 0**



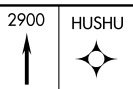
ELEV 990



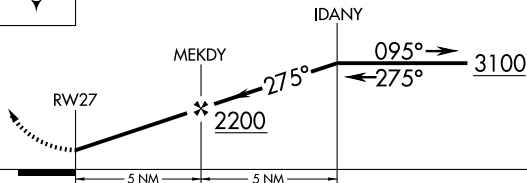
REIL Rws 9 and 27 0  
MIRL Rws 9-27 and 14-32 0

BIG RAPIDS, MICHIGAN

Orig-B 03JUN10



One Minute  
Holding Pattern



CATEGORY	A	B	C	D
S-27	1460-1	483 (500-1)	1460-1¼ 483 (500-1¼)	1460-1½ 483 (500-1½)
CIRCLING	1500-1	510 (600-1)	1540-1½ 550 (600-1½)	1600-2 610 (700-2)
MUSKEGON ALTIMETER SETTING MINIMUMS				
S-27	1620-1	643 (700-1)	1620-1¾ 643 (700-1¾)	1620-2 643 (700-2)
CIRCLING	1660-1	670 (700-1)	1700-2 710 (800-2)	1760-2½ 770 (800-2½)

BIG RAPIDS / ROBEN-HOOD (RQB)

# GPS RWY 27

43°43'N - 85°30'W

VOR/DME HIC  
**117.6**  
Chan **123**

APP CRS  
**047°**

Rwy Idg  
TDZE  
Apt Elev  
**N/A**  
**N/A**  
**990**

**VOR/DME or GPS-A**  
BIG RAPIDS / ROBEN-HOOD (RQB)

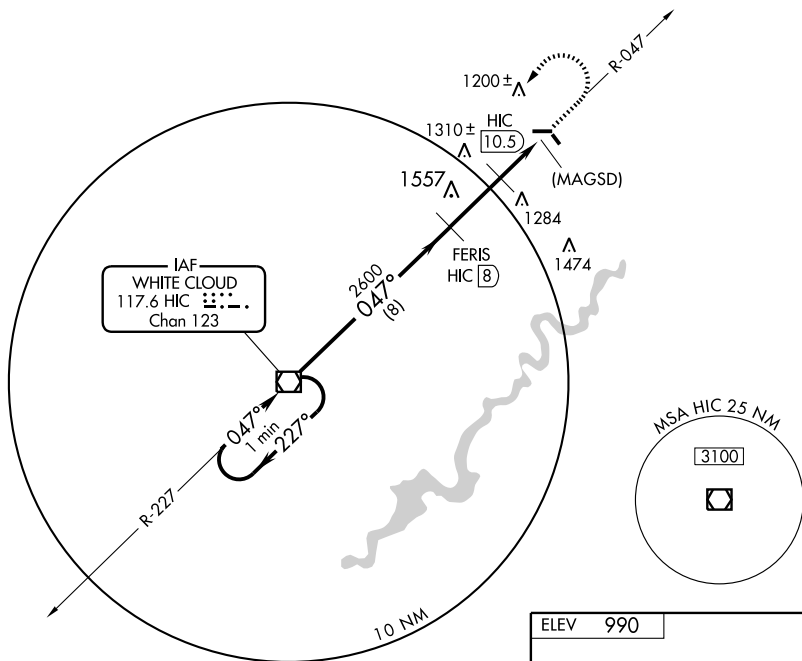
▼ Obtain local altimeter setting on CTAF; when  
▲ NA not received, use Muskegon altimeter setting.

MISSED APPROACH: Climb to 2800, then  
left turn direct HIC VOR/DME and hold.

AWOS-3  
**121.125**

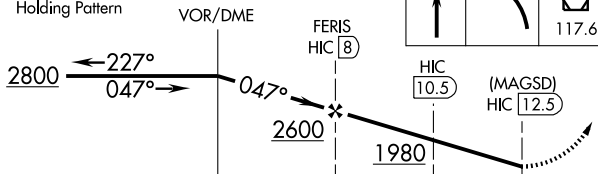
MINNEAPOLIS CENTER  
**120.85 322.35**

UNICOM  
**122.8 (CTAF) 0**



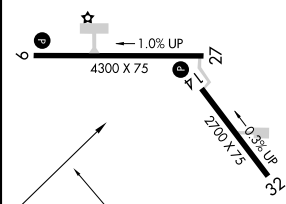
NoPT for arrivals on HIC VOR/DME  
airway radials 140 CW 303.

One Minute  
Holding Pattern



CATEGORY	A	B	C	D
CIRCLING	1540-1	550 (600-1)	1540-1½ 550 (600-1½)	1600-2 610 (700-2)
MUSKEGON ALTIMETER SETTING MINIMUMS				
CIRCLING	1700-1	710 (800-1)	1700-2 710 (800-2)	1760-2½ 770 (800-2½)

ELEV 990



047° 4.5 NM  
from FAF

REIL Rwy 9 and 27 0  
MIRL Rwy 9-27 and 14-32 0

**BOYNE FALLS****BOYNE MOUNTAIN** (BFA) 1 W UTC-5(-4DT) N45°09.95' W84°55.45'

719 FUEL 100LL, JET A + NOTAM FILE LAN

RWY 17-35: H5187X60 (ASPH) LIRL(NSTD) 0.3% up S

RWY 17: REIL. Thld dsplcd 300'. Road.

RWY 35: REIL. Thld dsplcd 500'. Trees.

**AIRPORT REMARKS:** Unattended. For fuel call 231-549-6000. Deer and birds on and invof arpt. Rwy 17-35 extensive cracking. Rwy 17-35 NSTD LIRL, 80' from rwy edges. Rwy has reflectors summer months. ACTIVATE NSTD LIRL Rwy 17-35 and REIL Rws 17 and 35-122.85. Rwy 17-35 has 10' paved shoulder each side; last 4700' Rwy 35.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

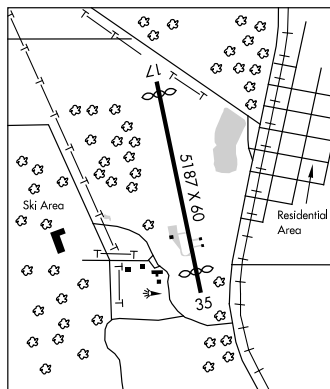
⑧ MINNEAPOLIS CENTER APP/DEP CON 134.6

**RADIO AIDS TO NAVIGATION:** NOTAM FILE PLN.

PELLSTON (L) VORTACW 111.8 PLN Chan 55

N45°37.84' W84°39.85' 208° 30 NM to fld.

840/6W. HIWAS.

**BOYNE MOUNTAIN** (See BOYNE FALLS)**BRANCH CO MEML** (See COLDWATER)**BRIGHTON** (45G) 3 N UTC-5(-4DT) N42°34.19' W83°46.71'

973 B NOTAM FILE LAN

RWY 04-22: H3120X24 (ASPH) MIRL (NSTD)

RWY 04: Thld dsplcd 195'. Trees.

RWY 22: PAPI(P4L)—GA 3.6° TCH 28'. Thld dsplcd 365'. Trees.

**AIRPORT REMARKS:** Attended irregularly. Rwy 04-22 NSTD MIRL located 50' from rwy edge, NSTD configuration for thlds. Rwy 22 NSTD PAPI, NSTD installation—may only be visible on short final apch. For local use only. ACTIVATE rotating bcn, MIRL Rwy 04-22 and PAPI Rwy 22—CTAF.

**COMMUNICATIONS:** CTAF 122.9**RADIO AIDS TO NAVIGATION:** NOTAM FILE LAN.

SALEM (L) VORTAC 114.3 SVM Chan 90 N42°24.53' W83°35.65' 323° 12.7 NM to fld. 950/3W.

DETROIT  
COPTER  
L-28J, A**BROOKLYN****SHAMROCK FLD** (6G8) 1 SE UTC-5(-4DT) N42°05.70' W84°14.45'

995 NOTAM FILE LAN

RWY 01-19: 2822X100 (TURF) LIRL

RWY 01: Tree. Rgt tfc.

RWY 19: Thld dsplcd 613'. P-line.

**AIRPORT REMARKS:** Attended May-Nov irregularly. Dec-Apr arpt CLOSED. CAUTION: Deer on and invof arpt. 105' unlighted p-line and tower ¼ mile from thld extended left and right of centerline Rwy 19. ACTIVATE LIRL Rwy 01-19—CTAF. All tfc patterns conducted E of Rwy 01-19. Rwy 01-19 marked with 3' yellow cones; dsplcd thld marked with 3 cones each side.

**COMMUNICATIONS:** CTAF 122.9DETROIT  
COPTER**BROOKS FLD** (See MARSHALL)**BUNCH'S HALF ACRE** (See HARRIETTA)**CAKLEBERRY** (See DEXTER)**CADILLAC** N44°16.50' W85°24.86' NOTAM FILE CAD.

NDB (MHW) 269 CAD at Wexford Co.

GREEN BAY  
L-31B

APP CRS **175°**  
 Rwy Idg **4887**  
 TDZE **707**  
 Apt Elev **719**

# RNAV (GPS) RWY 17

BOYNE FALLS/ BOYNE MOUNTAIN (BFA)

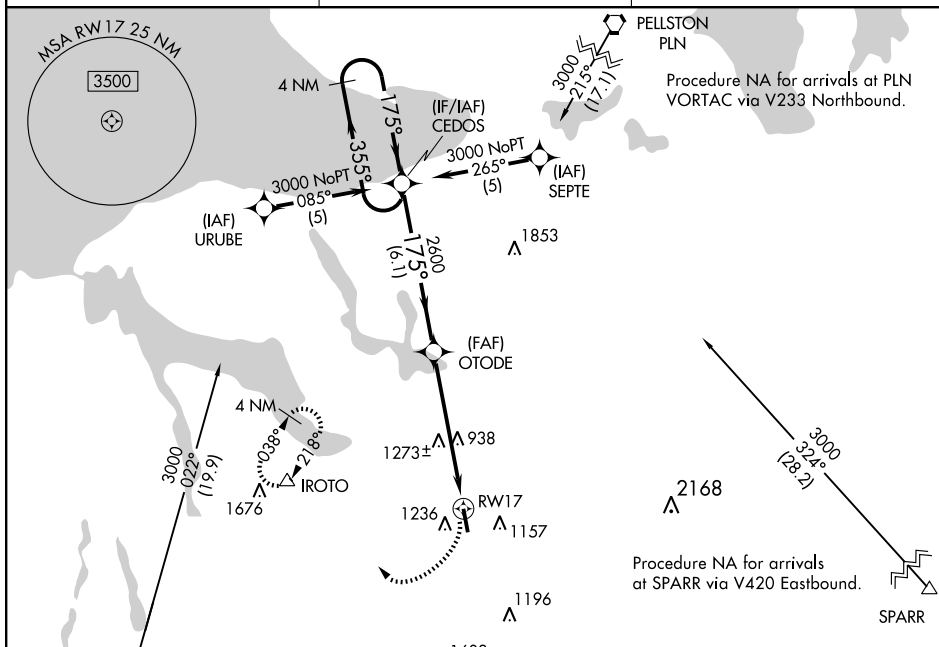
**NA** Circling NA west of Rwy 17-35. DME/DME RNP-0.3 NA. Use Bellaire altimeter setting; when not received, use Pellston altimeter setting and increase all MDAs 20 feet and increase LNAV CATs A, C, and D visibility ¼ mile, and Circling CATs A and C ¼ mile.

**MISSED APPROACH:** Climbing right turn to 3000 direct IROTO and hold.

MINNEAPOLIS CENTER  
**134.6 354.05**

UNICOM  
**122.8 (CTAF)**

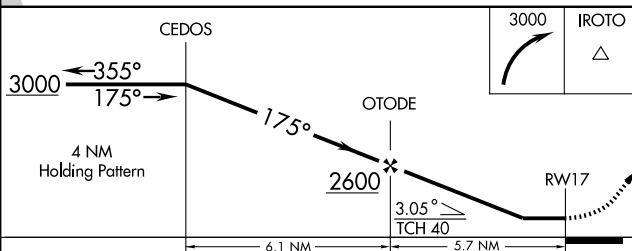
**122.85 0**



ELEV 719

175° to  
 RW17

TDZE  
 707



CATEGORY	A	B	C	D
LNAV MDA	1580 - 1 873 (900-1)	1580 - 1¼ 873 (900-1¼)	1580 - 2½ 873 (900-2½)	1580 - 2¾ 873 (900-2¾)
CIRCLING	1580 - 1 861 (900-1)	1580 - 1¼ 861 (900-1¼)	1580 - 2½ 861 (900-2½)	1640 - 3 921 (1000-3)

REIL Rwy 17 and 35  
 URL Rwy 17-35

APP CRS	Rwy Idg	<b>4687</b>
<b>355°</b>	TDZE	<b>719</b>
	Apt Elev	<b>719</b>

## RNAV (GPS) RWY 35

BOYNE FALLS/ BOYNE MOUNTAIN (BFA)



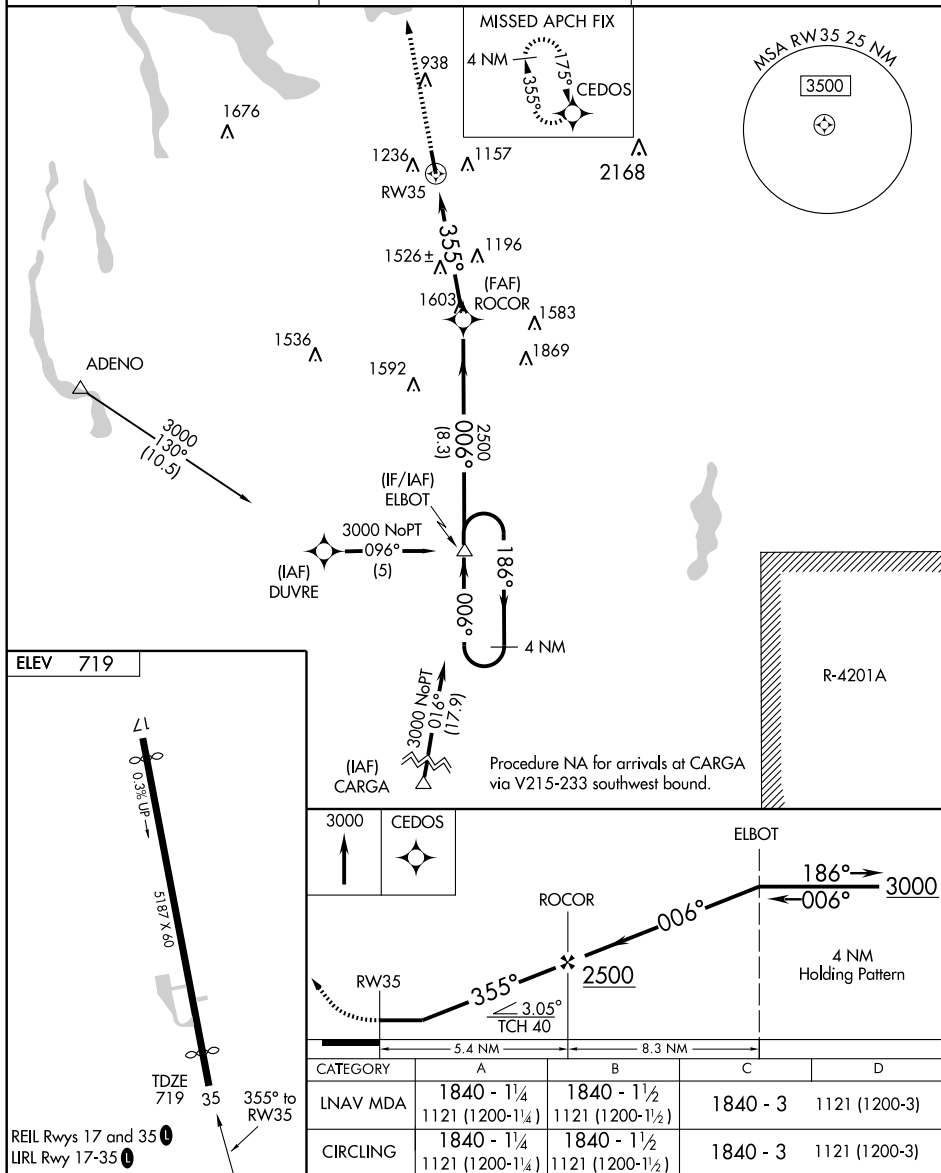
Circling NA west of Rwy 17-35. DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. Use Bellaire altimeter setting; when not received, use Pellston altimeter setting.

MISSED APPROACH: Climb to 3000  
direct CEDOS and hold.

MINNEAPOLIS CENTER  
134.6 354.05

UNICOM  
122.8 (CTAF)

122.85 L



BOYNE FALLS, MICHIGAN  
Orig 09295

BOYNE FALLS/BOYNE MOUNTAIN (BFA)  
PNIAV (GPS) PWV 35

RNAV (GPS) RWY 35

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1. 23 SEP 2010 to 21 OCT 2010



## CADILLAC

WEXFORD CO (CAD) 2 N UTC-5(-4DT) N44°16.52' W85°25.14'

1307 B S4 FUEL 100LL, JET A NOTAM FILE CAD

RWY 07-25: H5000X100 (ASPH-PFC) S-30, D-45 MIRL

RWY 07: REIL. MALS. VASI(V2L)—GA 3.0° TCH 41'.

RWY 25: REIL. PAPI(P4L)—GA 3.0° TCH 44'. Railroad.

RWY 18-36: 2006X150 (TURF)

RWY 18: Trees.

RWY 36: Stack.

**AIRPORT REMARKS:** Attended Mon-Fri 1200-2200Z†, Jun-Aug Sat-Sun 1200-2200Z†, Sep-May Sat-Sun 1200-1800Z†. After hrs attendance avbl on req 231-779-9211. Unattended New Years, Easter, Thanksgiving, Christmas. Fuel 24 hr self svc. Rwy 18-36 CLOSED Dec thru Mar and when snow covered except for ski equipped acft. Deer on and invof arpt. Glider activity on and invof arpt Apr-Nov. Ultralight activity on and invof arpt Apr-Nov. ACTIVATE MIRL Rwy 07-25; MALS Rwy 07; REIL Rwy 07 and Rwy 25; VASI Rwy 07 and PAPI Rwy 25—CTAF. Ldg fee. Ldg fee for commercial ops waived with minimum fuel purchase. Rwy 18-36 marked with 18 inch yellow cones.

**WEATHER DATA SOURCES:** AWOS-3 128.325 (231) 779-9536.**COMMUNICATIONS:** CTAF/UNICOM 122.8

① MINNEAPOLIS CENTER APP/DEP CON 132.9

GCO 121.725 (MINNEAPOLIS CENTER CLNC and LANSING FSS)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE TVC.

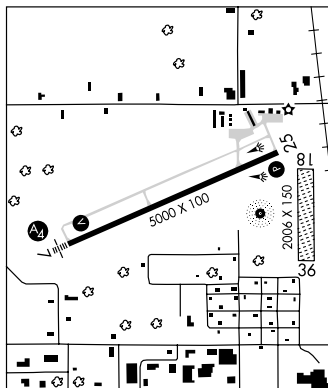
TRAVERSE CITY (H) VORTACW 114.6 TVC Chan 93 N44°40.07' W85°33.00' 169° 24.2 NM to fld. 912/2W.

HIWAS

CADILLAC NDB (MHW) 269 CAD N44°16.50' W85°24.86' at fld. NOTAM FILE CAD.

WEXOR NDB (LOM) 336 MA N44°14.22' W85°32.84' 071° 6 NM to fld.

ILS/DME 108.55 I-MAY Chan 22(Y) Rwy 07. LOM WEXOR NDB.



CAGNEY (See CLIO)

CAIN FLD (See STANWOOD)

CALKINS FLD (see WAYLAND)

CALVIN CAMPBELL MUNI (See INDIAN RIVER)

CANTON-PLYMOUTH-METTETAL (See PLYMOUTH)

CAPITAL REGION INTL (See LANSING)

CARGL N42°21.38' W82°57.26'. NOTAM FILE DET.

NDB (MHW/LOM) 230 VQ 327° 4 NM to Coleman A. Young Muni.

DETROIT  
A

CARLETON N42°02.88' W83°27.45' NOTAM FILE LAN.

(H) VORTAC 115.7 CRL Chan 104 028° 10.9 NM to Detroit Metropolitan Wayne Co. 629/3W.

H-106, L-281, A

HIWAS.

VOR portion unusable 360°-040° blo 5000'. DME unusable byd 35 NM blo 2500'.

RCO 122.1R 115.7T (LANSING RADIO)

## CARLETON

WICKENHEISER (W87) 3 S UTC-5(-4DT) N42°01.09' W83°22.63'

610 S2 FUEL 100LL NOTAM FILE LAN

RWY 18-36: 2575X60 (TURF)

RWY 18: Thld dsplcd 1000'. P-line.

RWY 36: Trees.

RWY 09-27: 1920X60 (TURF)

RWY 09: Thld dsplcd 660'. P-line.

RWY 27: Trees.

**AIRPORT REMARKS:** Attended irregularly. No snow removal. Acft maintenance by prior arrangement; call arpt manager on 734-654-6249. Rwy 09-27 thlds marked with tires; Rwy 09 dsplcd thld marked with 3 yellow tires each side. Rwy 18-36 marked with 3' yellow cones.

**COMMUNICATIONS:** CTAF 122.9DETROIT  
COPTER

LOC/DME I-MAY  
**108.55**  
Chan **22**

APP CRS  
**070°**

Rwy Idg **5000**  
TDZE **1307**  
Apt Elev **1307**

**ILS or LOC RWY 7**  
CADILLAC / WEXFORD COUNTY (CAD)

ADF Required. When local altimeter setting not received, use Houghton Lake altimeter setting and increase all DA 137 feet and all MDA 140 feet and increase S-ILS 7 all Cats visibility  $\frac{1}{2}$  mile, S-LOC 7 visibility Cat C  $\frac{1}{2}$  mile and Cat D  $\frac{1}{4}$  mile, Circling visibility Cat C  $\frac{1}{2}$  mile and Cat D  $\frac{1}{4}$  mile. Inoperative table does not apply to S-LOC 7 Cat C visibility when using Houghton Lake altimeter setting.

MALS



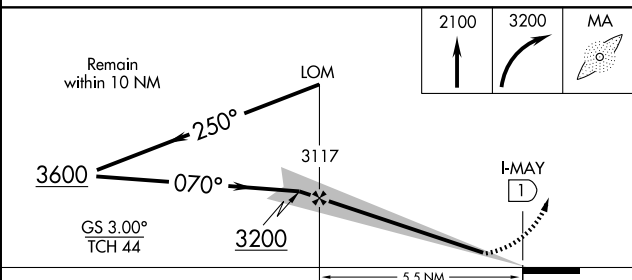
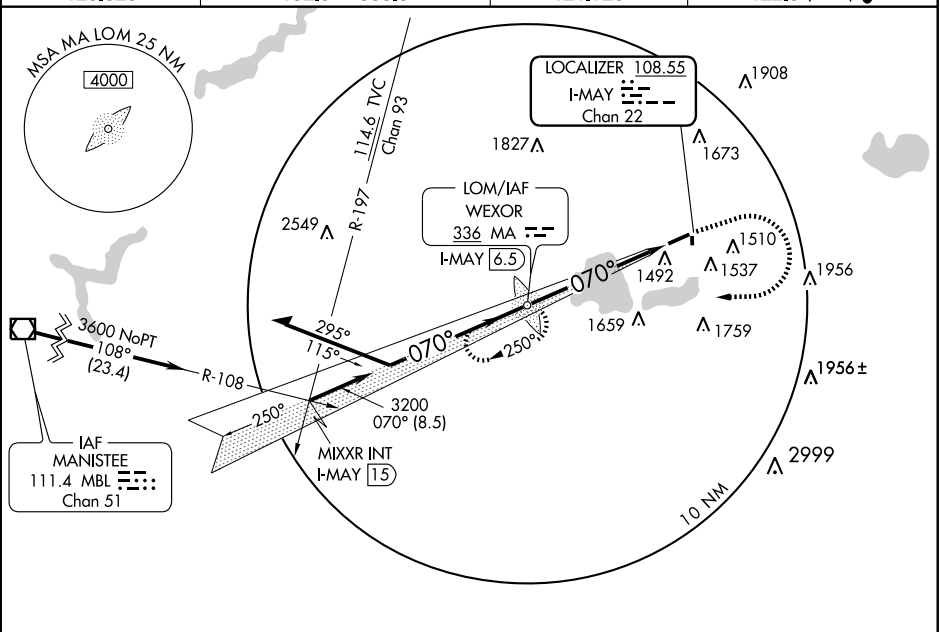
MISSED APPROACH: Climb to 2100, then climbing right turn to 3200 direct WEXOR LOM I-MAY 6.5 DME and hold.

AWOS-3  
**128.325**

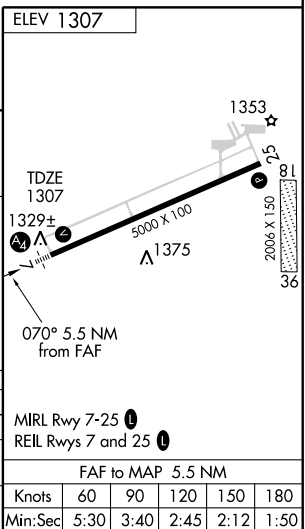
MINNEAPOLIS CENTER  
**132.9 338.3**

GCO  
**121.725**

UNICOM  
**122.8 (CTAF) 0**



CATEGORY	A	B	C	D
S-ILS 7	1507- $\frac{3}{4}$	200 (200- $\frac{3}{4}$ )		
S-LOC 7	1660- $\frac{3}{4}$	353 (400- $\frac{3}{4}$ )	1660-1 $\frac{1}{4}$ 353 (400-1 $\frac{1}{4}$ )	
CIRCLING	1860-1 553 (600-1)	1860-1 $\frac{1}{2}$ 553 (600-1 $\frac{1}{2}$ )	1880-2 573 (600-2)	





## NDB RWY 25

CADILLAC / WEXFORD COUNTY (CAD)

NDB CAD <b>269</b>	APP CRS <b>235°</b>	Rwy Idg TDZE Apt Elev	<b>5000</b> <b>1305</b> <b>1307</b>
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Visibility reduction by helicopters NA. When local altimeter setting not received, use Houghton Lake altimeter setting and increase all MDA 140 feet, S-25 and Circling visibilities Cat B  $\frac{1}{4}$  mile, Cats C and D  $\frac{1}{2}$  mile. Increase GACHA fix minimums S-25 visibilities Cats C and D  $\frac{1}{2}$  mile, Circling Cat C  $\frac{1}{2}$  mile, Cat D  $\frac{1}{4}$  mile.

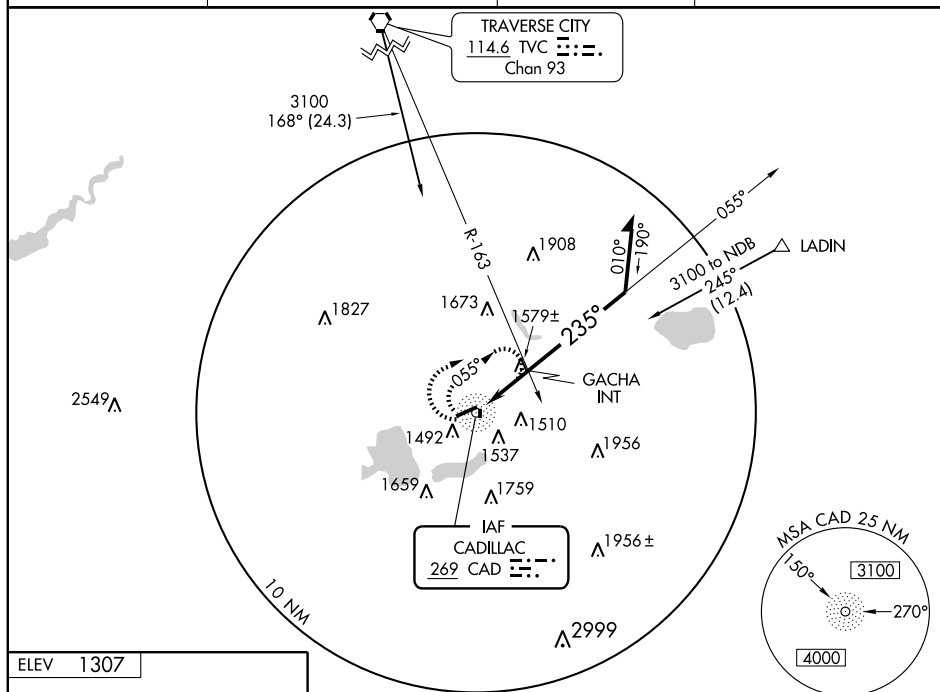
MISSED APPROACH:  
Climbing right turn to 3100  
in CAD NDB holding pattern.

AWOS-3  
**128.325**

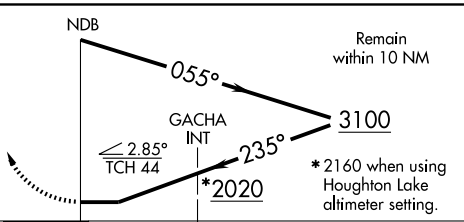
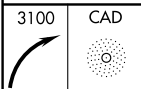
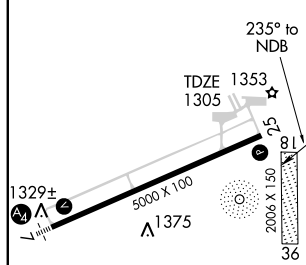
MINNEAPOLIS CENTER  
**132.9 338.3**

GCO  
**121.725**

UNICOM  
**122.8 (CTAF) 0**



ELEV 1307

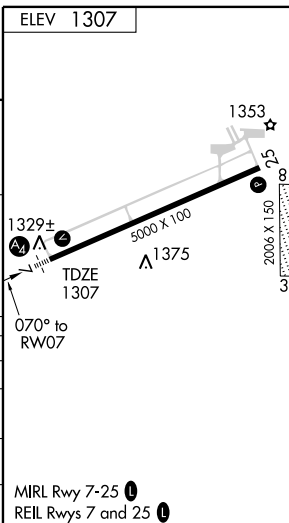


CATEGORY	A	B	C	D
S-25	2020-1 715 (800-1)	2020-2 715 (800-2)	2020-2 715 (800-2)	2020-2 715 (800-2)
CIRCLING	2020-1 713 (800-1)	2020-2 713 (800-2)	2020-2 713 (800-2)	2020-2 713 (800-2)
GACHA MINIMUMS				
S-25	1880-1 575 (600-1)	1880-1 575 (600-1)	1880-1 575 (600-1)	1880-1 575 (600-1)
CIRCLING	1880-1 573 (600-1)	1880-1 573 (600-1)	1880-1 573 (600-1)	1880-1 573 (600-1)

# RNAV (GPS) RWY 7

## CADILLAC / WEXFORD COUNTY (CAD)

**MISSED APPROACH:**  
Climb to 3000 direct  
TEVUY and hold.

UNICOM  
122.8 (CTAF) **L**

MIRL Rwy 7-25 **L**  
REIL Rwy 7 and 25 **L**

CADILLAC / WEXFORD COUNTY (CAD)  
RNAV (GPS) RWY 7

WAAS CH <b>97513</b> <b>W25A</b>	APP CRS <b>250°</b>	Rwy Idg TDZE Apt Elev	<b>5000</b> <b>1305</b> <b>1307</b>
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# RNAV (GPS) RWY 25

## CADILLAC / WEXFORD COUNTY (CAD)

▼ DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). Baro-VNAV and VDP NA when using Houghton Lake altimeter setting. When local altimeter setting not received, use Houghton Lake altimeter setting and increase all DA 137 feet, all MDA 140 feet, LPV and LNAV/VNAV visibilities all Cats ½ mile, LNAV visibilities Cats C and D ½ mile, Circling visibilities Cat C ½ mile and Cat D ¼ mile.

MISSED APPROACH: Climb to 3600 direct WIKAP and hold.

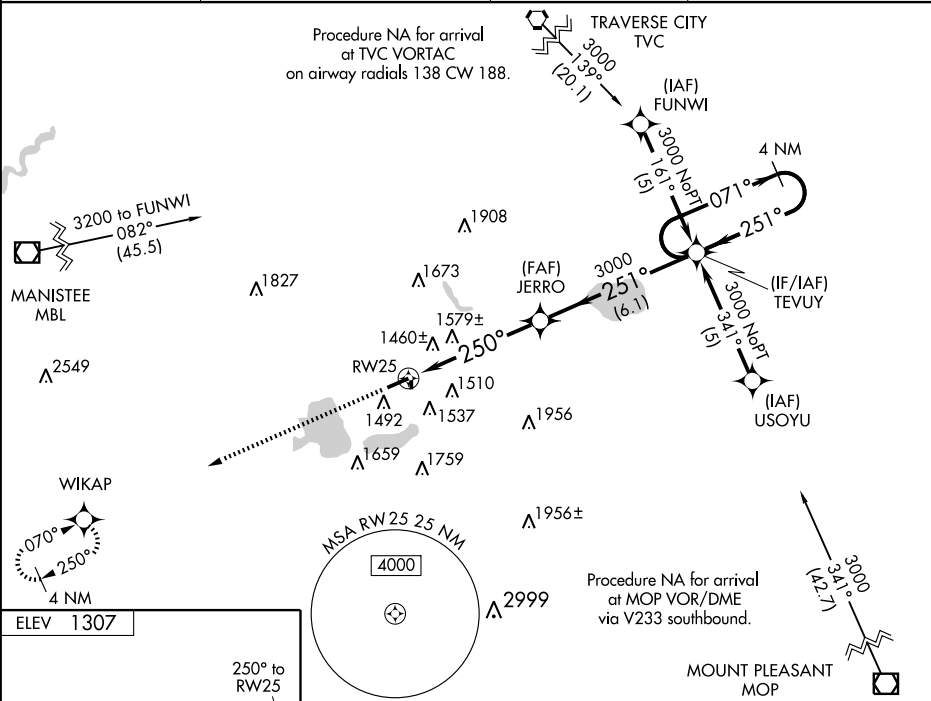
AWOS-3  
**128.325**

MINNEAPOLIS CENTER  
**132.9 338.3**

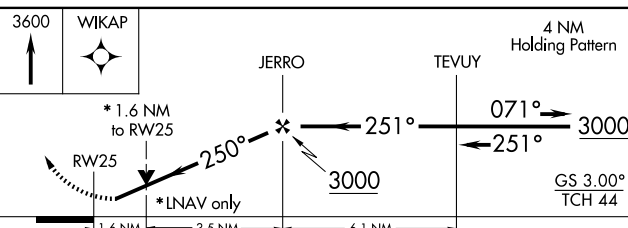
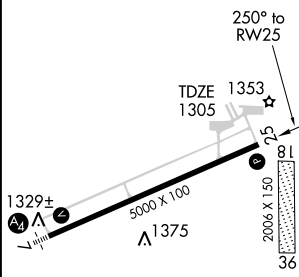
GCO  
**121.725**

UNICOM  
**122.8 (CTAF) 0**

Procedure NA for arrival  
at TVC VORTAC  
on airway radials 138 CW 188.



ELEV 1307



CATEGORY	A	B	C	D
LPV DA	1625-1¼	320 (400-1¼)		
LNAV/VNAV DA	1869-2	564 (600-2)		
LNAV MDA	1840-1 535 (600-1)	1840-1½ 535 (600-1½)	1840-1¾ 535 (600-1¾)	
CIRCLING	1860-1 553 (600-1)	1860-1½ 553 (600-1½)	1880-2 573 (600-2)	

MRL Rwy 7-25 0  
REIL Rws 7 and 25 0

## CARO

**TUSCOLA AREA** (CFS) 3 SW UTC-5(-4DT) N43°27.53' W83°26.73'

701 B S4 FUEL 100LL, JET A NOTAM FILE CFS

RWY 05-23: H4300X75 (ASPH) MIRL 0.4% up NE.

RWY 05: REIL. PAPI (P4L)—GA 3.0° TCH 25'. Trees.

RWY 23: REIL. PAPI(P4L)—GA 4.0°. Trees.

RWY 12-30: 2300X110 (TURF)

RWY 12: Trees. RWY 30: Thld dsplcd 500'. Trees.

**AIRPORT REMARKS:** Attended irregularly. For fuel after hrs call 989-673-2849; if arpt manager is unavbl call 989-673-2849. Deer on arpt. ACTIVATE MIRL Rwy 05-23; REIL and PAPI Rwy 05 and 23—CTAF. Rwy 12-30 thlds and dsplcd thlds marked with cones.

**WEATHER DATA SOURCES:** AWOS-3 119.275 (989) 672-4182.

**COMMUNICATIONS:** CTAF/UNICOM 123.0

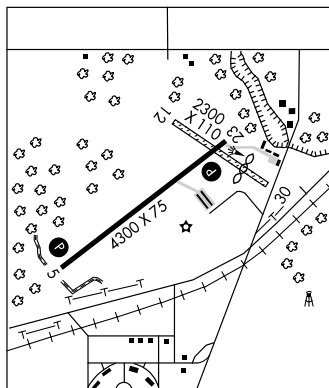
Ⓡ SAGINAW APP/DEP CON 120.95 (1100-0400Z)

CLEVELAND CENTER APP/DEP CON 127.7 (0400-1100Z)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE MBS.

SAGINAW (L) VOR/DME 112.9 MBS Chan 76 N43°31.90'

W84°04.64' 102° 27.9 NM to fld. 663/3W. HIWAS.



DETROIT  
L-281, 31C  
IAP

## CARSONVILLE

**CIRCLE U HELIPORT** (2F2) 5 SW UTC-5(-4DT) N43°29.49' W82°37.42'

729 NOTAM FILE LAN

HELIPAD H1: H47X17 (CONC)

**HELIPORT REMARKS:** Attended dusk-dawn. Apch departure routes 340°-020° and 115°-140°. Helipad H1 perimeter lgts. Perimeter lgts OTS indef.

**COMMUNICATIONS:** CTAF/UNICOM 123.05

DETROIT

**CHARLEVOIX MUNI** (CVX) 1 SW UTC-5(-4DT) N45°18.29' W85°16.52'

669 B S4 FUEL 100LL, JET A NOTAM FILE CVX

RWY 09-27: H4550X75 (ASPH) S-12.5 MIRL 0.6% up W

RWY 09: REIL. PAPI(P4R)—GA 3.0°. Tree.

RWY 27: REIL. PAPI(P4R)—GA 3.0° TCH 31'. Trees.

RWY 04-22: 1280X200 (TURF)

RWY 04: Trees. RWY 22: Tree.

**AIRPORT REMARKS:** Attended dawn-dusk. For fuel dawn-dusk call 231-547-2141. After hrs call 231-547-2058. Rwy 04-22 CLOSED Nov-Apr. Deer and birds on and invof arpt. Rwy 09 preferred rwy for ldg ngts, jets and turboprop acft. Rwy 27 preferred rwy for tkf ngts, jets and turboprop acft. Rwy 09-27 slopes up from E to W. -100' quarry/mine, 300' from Rwy 9 thld. ACTIVATE MIRL Rwy 09-27; REIL and PAPI Rwy 09 and Rwy 27—CTAF. Rwy 04-22 marked with 3' yellow cones. Landing fee. Landing fee waived with minimum fuel purchase.

**WEATHER DATA SOURCES:** AWOS-3 120 (231) 237-9703.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

Ⓡ MINNEAPOLIS CENTER APP/DEP CON 134.6 GCO 121.725

(MINNEAPOLIS CENTER and FLIGHT SERVICES)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE PLN.

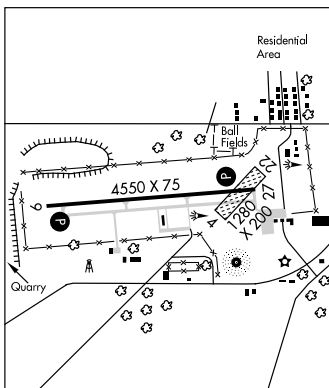
PELLSTON (L) VORTACW 111.8 PLN Chan 55 N45°37.84'

W84°39.85' 239° 32.4 NM to fld. 840/6W. HIWAS

NDB (MHW) 392 CVX N45°18.11' W85°15.20' at fld. NOTAM FILE CVX. Unmonitored. NDB unusable byd 15 NM.

**COMM/NAV/WEATHER REMARKS:** GCO OTS indef.

GREEN BAY  
L-31B  
IAP



APP CRS **058°**  
Rwy Idg **4300**  
TDZE **692**  
Apt Elev **701**

# RNAV (GPS) RWY 5

CARO / TUSCOLA AREA (CFS)

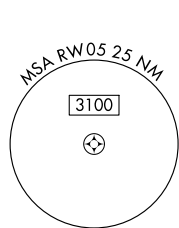
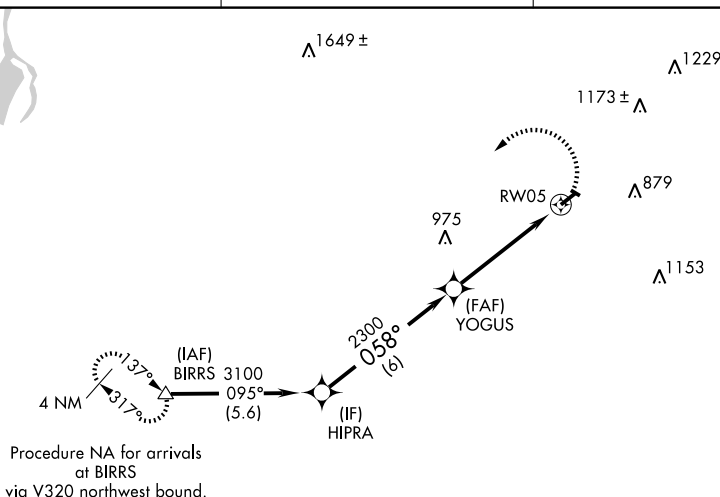
**⚠** When local altimeter setting not received, use Saginaw/MBS Intl altimeter setting and increase all MDA 80 feet. Visibility reduction by helicopters NA. DME/DME RNP-0.3 NA.

**MISSED APPROACH:** Climbing left turn to 3100 direct BIRRS and hold.

AWOS-3  
**119.275**

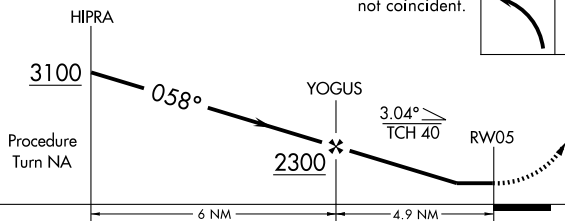
SAGINAW APP CON ★  
**120.95 235.625**

UNICOM  
**123.0 (CTAF) 0**



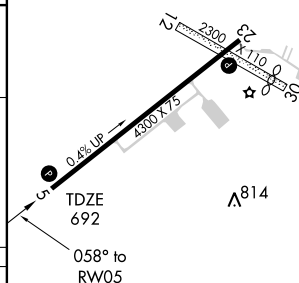
Procedure NA for arrivals at FNT VORTAC via V84 westbound.

VGSI and descent angles not coincident.



CATEGORY	A	B	C	D
LNNAV MDA	1100-1	408 (400-1)	NA	NA
CIRCLING	1220-1	519 (600-1)	NA	NA

ELEV 701



REIL Rwy 5 and 23 0  
MIRL Rwy 5-23 0



APP CRS <b>238°</b>	Rwy Idg <b>4300</b>
TDZE <b>701</b>	
Apt Elev <b>701</b>	

**RNAV (GPS) RWY 23**

CARO / TUSCOLA AREA (CFS)

**⚠** When local altimeter setting not received, use Saginaw/MBS Intl altimeter setting and increase all MDA 80 feet. DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.

**MISSED APPROACH:** Climb to 3100 direct YOGUS and via 256° track to BIRRS and hold.

AWOS-3  
**119.275**

SAGINAW APP CON ★  
**120.95 235.625**

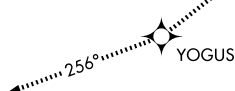
UNICOM  
**123.0 (CTAF) 0**

SAGINAW MBS

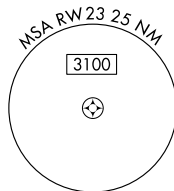


Procedure NA for arrivals at MBS VORTAC via V320 northwest bound.

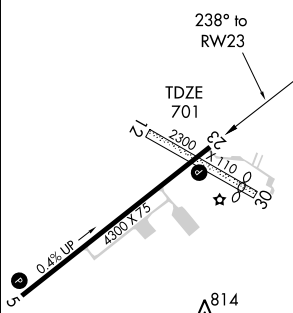
A 1649±



WINTO



ELEV 701



REIL Rwy 5 and 23 0  
MIRL Rwy 5-23 0

3100 YOGUS 256° TRK BIRRS VGSI and descent angles not coincident.

	KAYET		RAYOL	
	LIYIG 2.6 NM to RW23		238° <u>2300</u>	
	RW23		Procedure Turn NA	
	1560 3.04° TCH 40			
	2.6 NM		2.2 NM	
			6 NM	
CATEGORY	A		D	
LNVA MDA	1160-1 459 (500-1)		NA	
CIRCLING	1220-1 519 (600-1)		NA	

VOR/DME MBS <b>112.9</b> Chan <b>76</b>	APP CRS <b>102°</b>	Rwy Idg TDZE Apt Elev <b>N/A</b> <b>N/A</b> <b>701</b>
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# VOR/DME-A

CARO / TUSCOLA AREA (CFS)

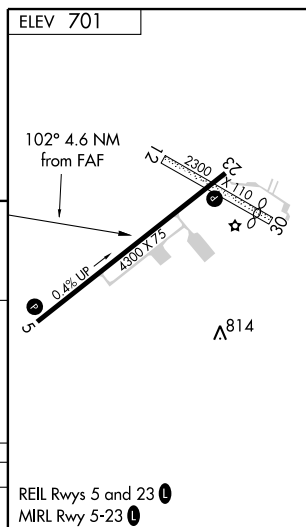
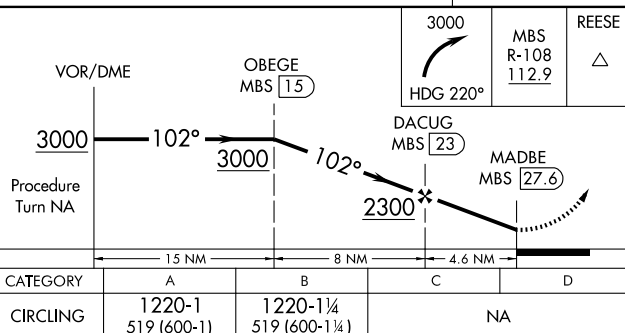
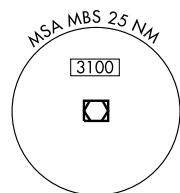
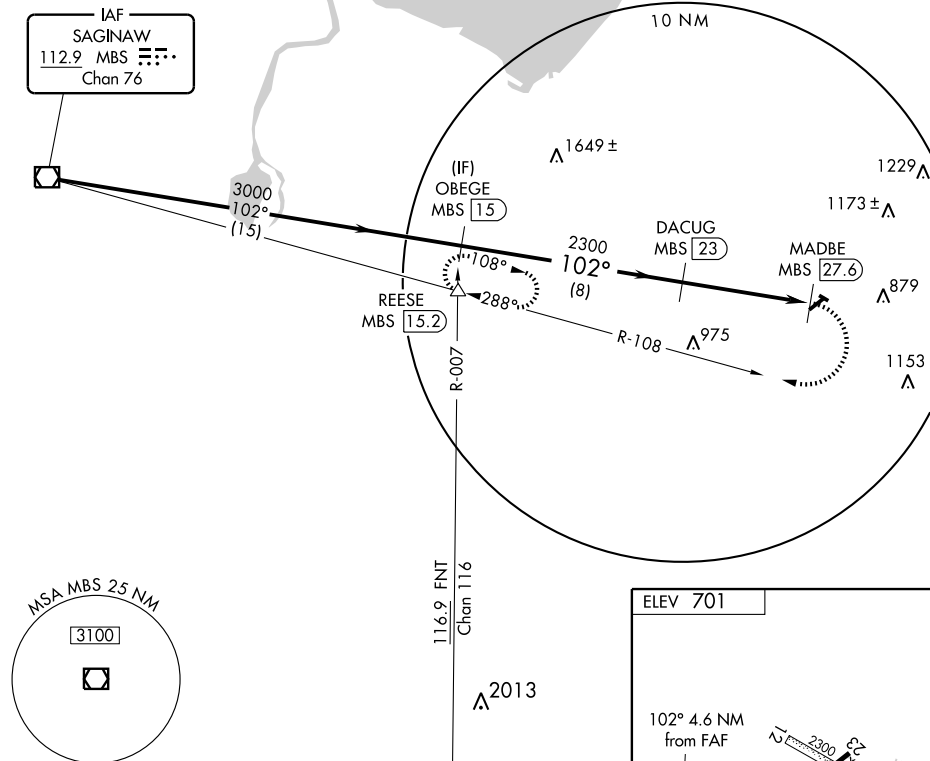
**▼** When local altimeter setting not received, use Saginaw/MBS Int'l altimeter setting and increase all MDA 80 feet.

**MISSED APPROACH:** Climbing right turn to 3000 via heading 220° and MBS VOR/DME R-108 to REESE INT and hold.

AWOS-3  
**119.275**

SAGINAW APP CON\*  
**120.95 235.625**

UNICOM  
**123.0 (CTAF) 0**



## CARO

**TUSCOLA AREA** (CFS) 3 SW UTC-5(-4DT) N43°27.53' W83°26.73'

701 B S4 FUEL 100LL, JET A NOTAM FILE CFS

RWY 05-23: H4300X75 (ASPH) MIRL 0.4% up NE.

RWY 05: REIL. PAPI (P4L)—GA 3.0° TCH 25'. Trees.

RWY 23: REIL. PAPI(P4L)—GA 4.0°. Trees.

RWY 12-30: 2300X110 (TURF)

RWY 12: Trees. RWY 30: Thld dsplcd 500'. Trees.

**AIRPORT REMARKS:** Attended irregularly. For fuel after hrs call 989-673-2849; if arpt manager is unavbl call 989-673-2849. Deer on arpt. ACTIVATE MIRL Rwy 05-23; REIL and PAPI Rwy 05 and 23—CTAF. Rwy 12-30 thlds and dsplcd thlds marked with cones.

**WEATHER DATA SOURCES:** AWOS-3 119.275 (989) 672-4182.

**COMMUNICATIONS:** CTAF/UNICOM 123.0

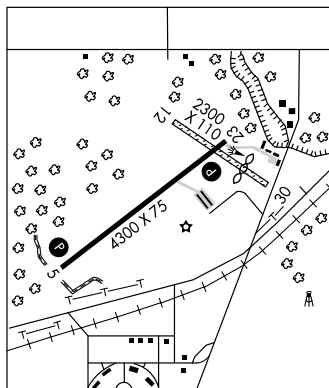
Ⓡ SAGINAW APP/DEP CON 120.95 (1100-0400Z‡)

CLEVELAND CENTER APP/DEP CON 127.7 (0400-1100Z‡)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE MBS.

SAGINAW (L) VOR/DME 112.9 MBS Chan 76 N43°31.90'

W84°04.64' 102° 27.9 NM to fld. 663/3W. HIWAS.



DETROIT  
L-281, 31C  
IAP

## CARSONVILLE

**CIRCLE U HELIPORT** (2F2) 5 SW UTC-5(-4DT) N43°29.49' W82°37.42'

729 NOTAM FILE LAN

HELIPAD H1: H47X17 (CONC)

**HELIPORT REMARKS:** Attended dusk-dawn. Apch departure routes 340°-020° and 115°-140°. Helipad H1 perimeter lgts. Perimeter lgts OTS indef.

**COMMUNICATIONS:** CTAF/UNICOM 123.05

DETROIT

**CHARLEVOIX MUNI** (CVX) 1 SW UTC-5(-4DT) N45°18.29' W85°16.52'

669 B S4 FUEL 100LL, JET A NOTAM FILE CVX

RWY 09-27: H4550X75 (ASPH) S-12.5 MIRL 0.6% up W

RWY 09: REIL. PAPI(P4R)—GA 3.0°. Tree.

RWY 27: REIL. PAPI(P4R)—GA 3.0° TCH 31'. Trees.

RWY 04-22: 1280X200 (TURF)

RWY 04: Trees. RWY 22: Tree.

**AIRPORT REMARKS:** Attended dawn-dusk. For fuel dawn-dusk call 231-547-2141. After hrs call 231-547-2058. Rwy 04-22 CLOSED Nov-Apr. Deer and birds on and invof arpt. Rwy 09 preferred rwy for ldg ngts, jets and turboprop acft. Rwy 27 preferred rwy for tkf ngts, jets and turboprop acft. Rwy 09-27 slopes up from E to W. -100' quarry/mine, 300' from Rwy 9 thld. ACTIVATE MIRL Rwy 09-27; REIL and PAPI Rwy 09 and Rwy 27—CTAF. Rwy 04-22 marked with 3' yellow cones. Landing fee. Landing fee waived with minimum fuel purchase.

**WEATHER DATA SOURCES:** AWOS-3 120 (231) 237-9703.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

Ⓡ MINNEAPOLIS CENTER APP/DEP CON 134.6 GCO 121.725

(MINNEAPOLIS CENTER and FLIGHT SERVICES)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE PLN.

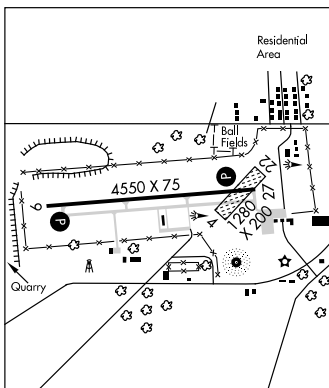
PELLSTON (L) VORTACW 111.8 PLN Chan 55 N45°37.84'

W84°39.85' 239° 32.4 NM to fld. 840/6W. HIWAS

NDB (MHW) 392 CVX N45°18.11' W85°15.20' at fld. NOTAM FILE CVX. Unmonitored. NDB unusable byd 15 NM.

**COMM/NAV/WEATHER REMARKS:** GCO OTS indef.

GREEN BAY  
L-31B  
IAP



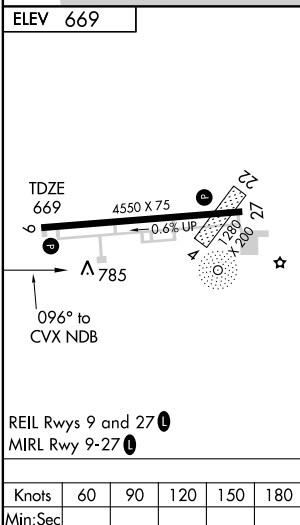
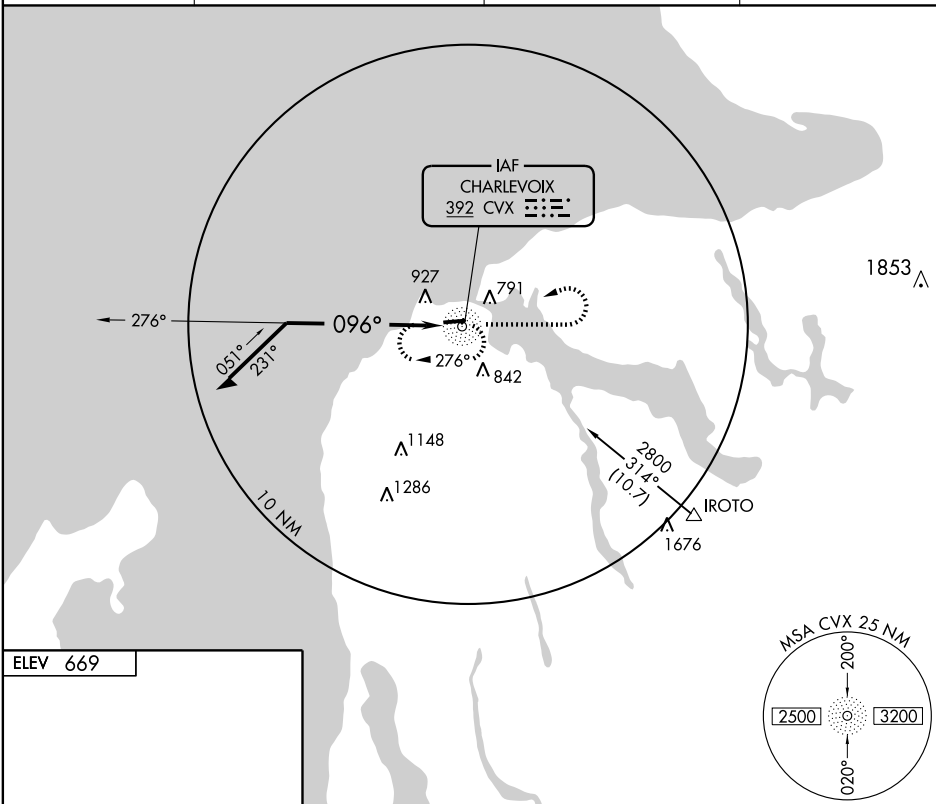
NDB CVX <b>392</b>	APP CRS <b>096°</b>	Rwy Idg TDZE Apt Elev	<b>4550</b> <b>669</b> <b>669</b>
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# NDB RWY 9

## CHARLEVOIX MUNI (CVX)

<p>▼ If local altimeter setting not received, use Pellston altimeter setting and increase all MDAs 80 feet.</p> <p>▲ NA Circling to Rwy 4/22 NA at night.</p>	<p>MISSED APPROACH: Climb to 2000 then climbing left turn to 2800 direct CVX NDB and hold.</p>
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AWOS-3 <b>120.0</b>	MINNEAPOLIS CENTER <b>134.6 354.05</b>	UNICOM <b>122.8</b> (CTAF) <b>0</b>	GCO <b>121.725</b>
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<p>Remain within 10 NM</p> <p>NDB</p> <p>2800</p> <p>276°</p> <p>096°</p>			<p>2000</p> <p>2800</p> <p>CVX</p> <p>392</p>	
CATEGORY	A	B	C	D
S-9	1340-1	671 (700-1)	1340-2 671 (700-2)	1340-2 ¼ 671 (700-2 ¼)
CIRCLING	1340-1	671 (700-1)	1340-2 671 (700-2)	1340-2 ¼ 671 (700-2 ¼)

NDB CVX <b>392</b>	APP CRS <b>255°</b>	Rwy Idg TDZE Apt Elev	<b>4550</b> <b>662</b> <b>669</b>
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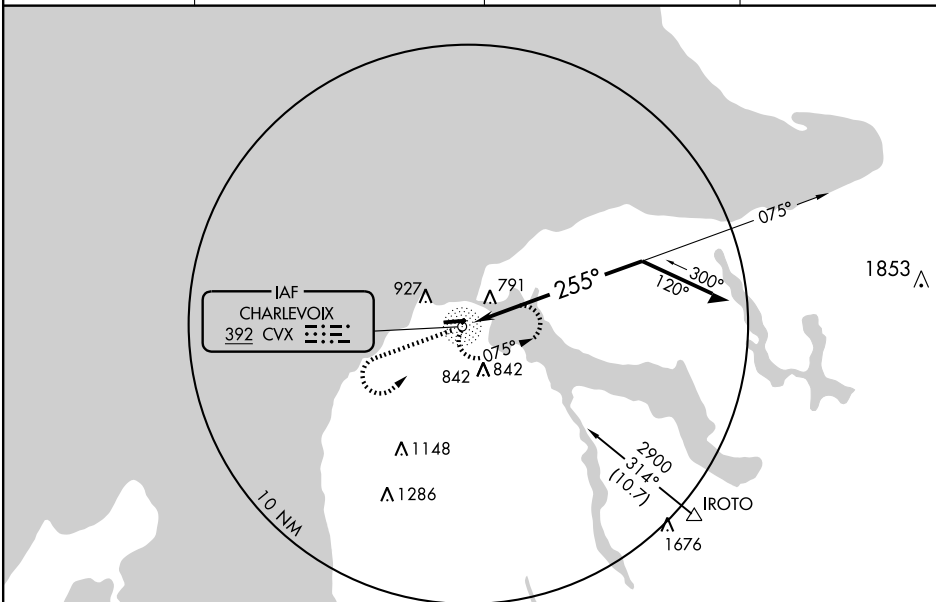
# NDB RWY 27

## CHARLEVOIX MUNI (CVX)

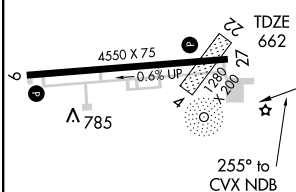
**▼** If local altimeter setting not received, use Pellston  
altimeter setting and increase all MDAs 80 feet.  
**▲ NA** Circling to Rwy 4/22 NA at night.

**MISSED APPROACH:** Climb to 2000 then climbing  
left turn to 2900 direct CVX NDB and hold.

AWOS-3 <b>120.0</b>	MINNEAPOLIS CENTER <b>134.6 354.05</b>	UNICOM <b>122.8 (CTAF) 0</b>	GCO <b>121.725</b>
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ELEV **669**



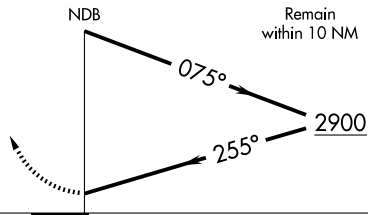
REIL Rwy 9 and 27 **0**  
MIRL Rwy 9-27 **0**

Knots	60	90	120	150	180
Min:Sec					

CHARLEVOIX, MICHIGAN

Amdt 11 08157

2000 ↑	2900 ↙	CVX ○ 392
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CATEGORY	A	B	C	D
S-27	1460-1 798 (800-1)	1460-1 ¼ 798 (800-1 ¼)	1460-2 ¼ 798 (800-2 ¼)	1460-2 ½ 798 (800-2 ½)
CIRCLING	1460-1 791 (800-1)	1460-1 ¼ 791 (800-1 ¼)	1460-2 ¼ 791 (800-2 ¼)	1460-2 ½ 791 (800-2 ½)

CHARLEVOIX MUNI (CVX)

# NDB RWY 27

45°18'N - 85°17'W

WAAS CH <b>97708</b> <b>W09A</b>	APP CRS <b>090°</b>	Rwy Idg <b>4550</b> TDZE <b>669</b> Apt Elev <b>669</b>
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## RNAV (GPS) RWY 9

CHARLEVOIX MUNI (CVX)

Circling to Rwy 4/22 NA at night. Baro-VNAV NA when using Pellston altimeter setting.  
 For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Pellston altimeter setting and increase all DA 67 feet and all MDA 80 feet, increase LNAV/VNAV all Cats visibility ¼ mile, LNAV and Circling Cat C and D visibility ¼ mile.

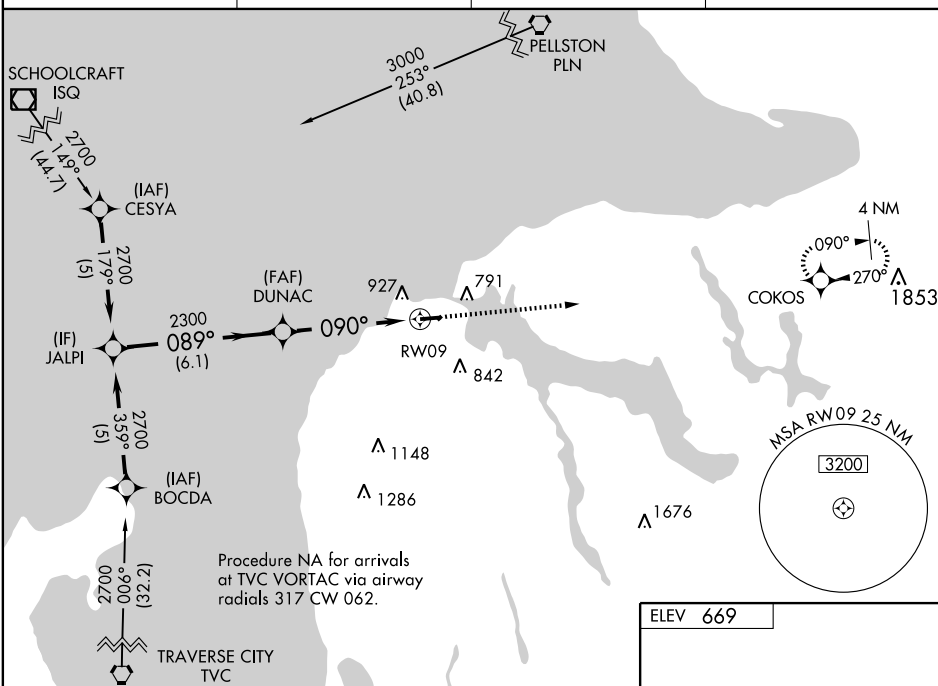
MISSED APPROACH: Climb to 3000 direct COKOS and hold.

AWOS-3  
**120.0**

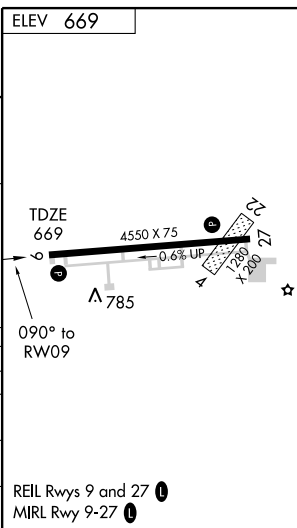
MINNEAPOLIS CENTER  
**134.6 354.05**

UNICOM  
**122.8 (CTAF) 0**

GCO  
**121.725**



Procedure Turn NA JALPI 2700 GS 3.00° TCH 45° VGSi and RNAV glidepath not coincident.				
DUNAC 2300 089° 090°				
RW09 4.9 NM 6.1 NM				
CATEGORY	A	B	C	D
LPV DA	919-1 250 (300-1)			
LNAV/VNAV DA	1203-2 534 (600-2)			
LNAV MDA	1160-1 491 (500-1)		1160-1½ 491 (500-1½)	1160-1½ 491 (500-1½)
CIRCLING	1280-1 611 (700-1)		1280-1¾ 611 (700-1¾)	1280-2 611 (700-2)



APP CRS  
**270°**

Rwy Idg	<b>4550</b>
TDZE	<b>662</b>
Apt Elev	<b>669</b>

RNAV (GPS) RWY 27  
CHARLEVOIX MUNI (CVX)

If local altimeter setting not received, use Pellston altimeter setting and increase all MDAs 80 feet.  
DME/DME RNP-0.3 NA. Circling to Rwy 4/22 NA at night.  
**IAF** ARM APPROACH MODE PRIOR TO IAF.

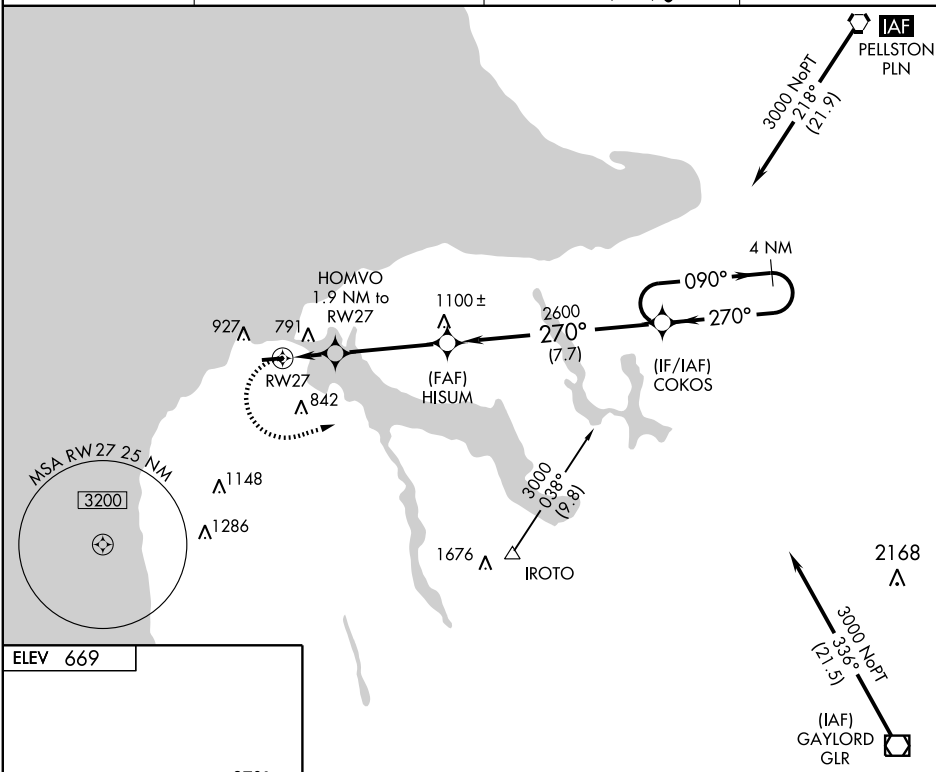
**MISSED APPROACH:** Climbing left turn to 3000 direct COKOS and hold.

AWOS-3  
120.0

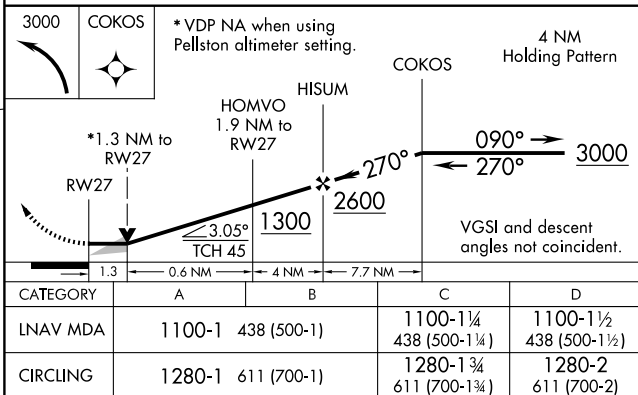
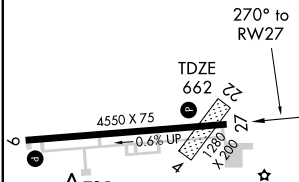
MINNEAPOLIS CENTER  
134.6 354.05

UNICOM  
122.8 (CTAF) **L**

GCO  
121.725



ELEV 669



REIL Rwy 9 and 27 **L**  
MIRL Rwy 9-27 **L**

CHARLEVOIX, MICHIGAN  
Orig 08157

45°18'N - 85°17'W

CHARLEVOIX MUNI (CVX)  
RNAV (GPS) RWY 27

EC-1. 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010

## CHARLOTTE

**FITCH H BEACH** (FPK) 2 NE UTC-5(-4DT) N42°34.47' W84°48.69'

DETROIT

891 B S4 FUEL 100LL NOTAM FILE FPK

L-28J

**RWY 02-20:** H3500X75 (CONC) S-26 MIRL 0.3% up NE

IAP

**RWY 02:** REIL. PAPI(P4L)—GA 4.0' TCH 40'. Trees.

**RWY 20:** REIL. PAPI(P4L)—GA 4.0' TCH 40'. Pole.

**RWY 14-32:** 2318X100 (TURF)

**RWY 14:** Thld dsplcd 575'. Trees.

**RWY 32:** Thld dsplcd 189'. Road.

**AIRPORT REMARKS:** Attended 1300Z—dusk. Military helicopter ops on and invof arpt, particularly at ngt. Be alert occasional deer on rwys. Rwy 14-32 CLOSED Dec-Mar and when snow covered. Rwy 14-32 thlds and dsplcd thlds marked with 3' yellow cones.

ACTIVATE MIRL Rwy 02-20; REIL and PAPI Rwy 02 and 20—CTAF.

**WEATHER DATA SOURCES:** AWOS-3 118.075 (517) 543-2288.

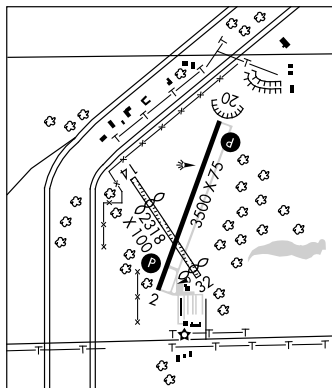
**COMMUNICATIONS:** CTAF/UNICOM 123.0

® LANSING APP/DEP CON 118.65

**RADIO AIDS TO NAVIGATION:** NOTAM FILE LAN.

**LANSING (L) VORTACW** 110.8 LAN Chan 45 N42°43.04'

W84°41.85' 216° 9.9 NM to fld. 887/5W.



**WEND VALLEY** (49G) 3 NW UTC-5(-4DT) N42°34.75' W84°54.50'

DETROIT

859 NOTAM FILE LAN

**RWY 18-36:** 1800X100 (TURF)

**RWY 18:** Trees. **RWY 36:** Trees.

**AIRPORT REMARKS:** Attended irregularly. No snow removal on Rwy 18-36. Arpt CLOSED Dec-Mar and when snow covered. Ultralight activity on and invof arpt. +30' p-line north end rwy. Rwy 18 and dsplcd thld marked with 3' yellow cones.

**COMMUNICATIONS:** CTAF 122.9

## CHEBOYGAN

**CHEBOYGAN CO** (SLH) 2 W UTC-5(-4DT) N45°39.22' W84°31.16'

LAKE HURON

640 B S4 FUEL 100LL, JET A NOTAM FILE SLH

L-31C

**RWY 10-28:** H4005X75 (ASPH) S-23, D-34, 2D-60 MIRL 0.3% up W

IAP

**RWY 10:** REIL. PAPI(P2L)—GA 4.0' TCH 25'. Road.

**RWY 28:** REIL. PAPI(P2L)—GA 4.0' TCH 25'. Trees.

**RWY 16-34:** 1600X75 (TURF)

**RWY 34:** Thld dsplcd 500'.

**AIRPORT REMARKS:** Attended 1300-2200Z. 100LL 24 hr self-serve. For Jet A after hrs call 231-627-7921, 231-420-0334. Deer and birds on and invof arpt. Rwy 16-34 CLOSED Dec-Mar and when snow covered. Rwy 16-34 soft when wet. Rwy 16 rwy and dsplcd thld marked with 3' yellow cones. ACTIVATE MIRL Rwy 10-28, PAPI Rwy 10 and Rwy 28 and REIL Rwy 10 and Rwy 28—122.5.

**WEATHER DATA SOURCES:** AWOS-3 118.175 (231) 627-4671.

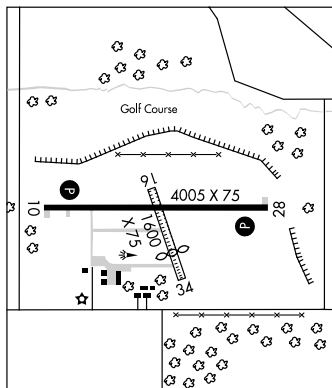
**COMMUNICATIONS:** CTAF/UNICOM 122.8

® MINNEAPOLIS CENTER APP/DEP CON 134.6

**RADIO AIDS TO NAVIGATION:** NOTAM FILE PLN.

**PELLSTON (L) VORTACW** 111.8 PLN Chan 55 N45°37.84'

W84°39.85' 083° 6.3 NM to fld. 840/6W. HIWAS





**RNAV (GPS) RWY 20**

CHARLOTTE / FITCH H. BEACH (F'PK)

APP CRS  
**204°**Rwy Idg **3500**  
TDZE **891**  
Apt Elev **891**

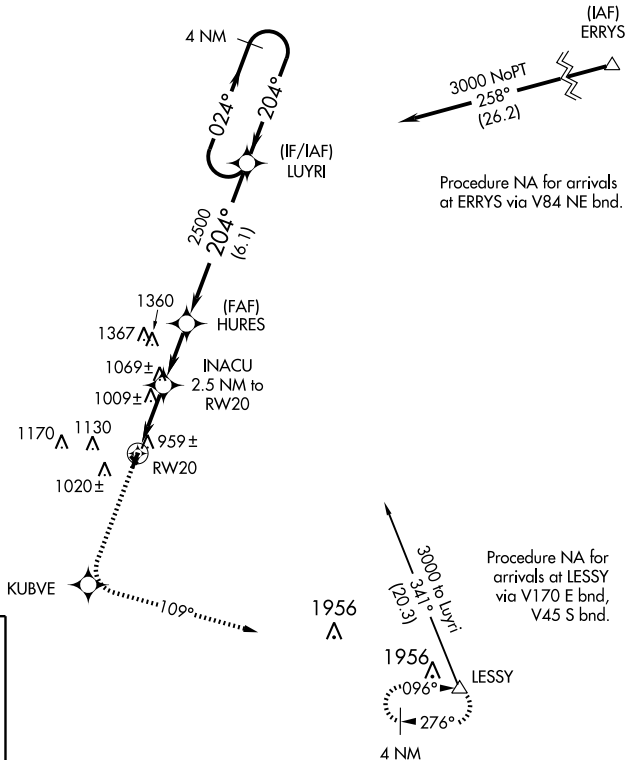
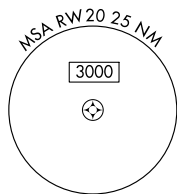
If local altimeter setting not received, use Capital Region Intl altimeter setting and increase all MDAs 60 feet. Visibility reduction by helicopters NA. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 3000 direct KUBVE and left turn via 109° track to LESSY and hold.

AWOS-3  
**118.075**LANSING APP CON  
**118.65 226.4**UNICOM  
**123.0 (CTAF) 0**

UNSUB  $\triangle$   $\xrightarrow{3000}$   
093°  
(15.9)

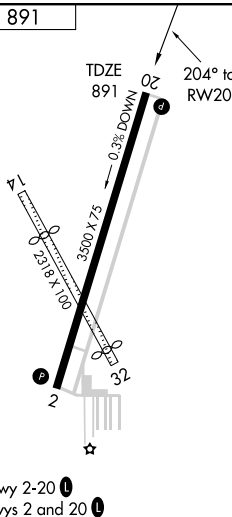
Procedure NA for arrivals at UNSUB via V510 W bnd.



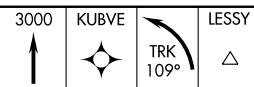
Procedure NA for arrivals at ERRYS via V84 NE bnd.

Procedure NA for arrivals at LESSY via V170 E bnd, V45 S bnd.

ELEV 891

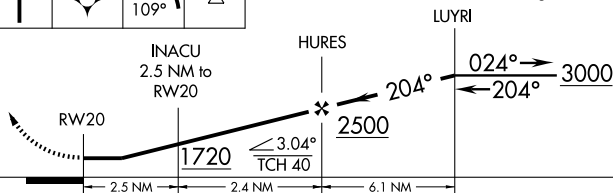


MIRL Rwy 2-20 0  
REIL Rws 2 and 20 0



VGSI and descent angles not coincident.

4 NM Holding Pattern



CATEGORY	A	B	C	D
INAV MDA	1300-1	409 (500-1)	1300-1¼ 409 (500-1¼)	NA
CIRCLING	1420-1 529 (600-1)	1480-1 589 (600-1)	1480-1½ 589 (600-1½)	NA

VORTAC LAN <b>110.8</b> Chan <b>45</b>	APP CRS <b>216°</b>	Rwy Idg TDZE Apt Elev <b>3500</b> <b>891</b> <b>891</b>
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# VOR or GPS RWY 20

CHARLOTTE / FITCH H. BEACH (F'PK)

**V** Use Lansing altimeter setting.  
**NA**

MISSED APPROACH: Climb to 2500 via LAN R-216 then right turn direct LAN VORTAC and hold.

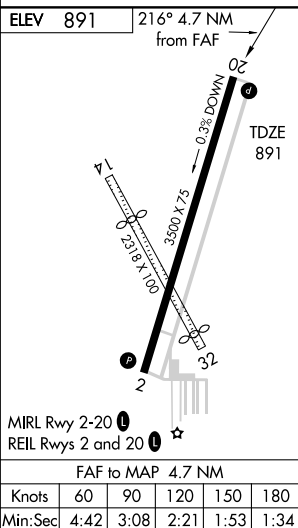
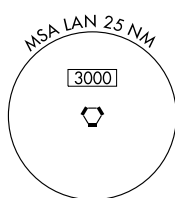
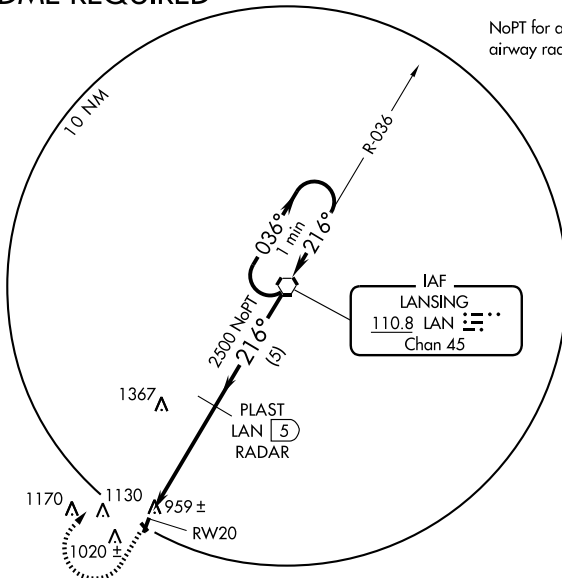
AWOS-3  
**118.075**

LANSING APP CON  
**118.65 226.4**

UNICOM  
**123.0** (CTAF) **0**

## RADAR or DME REQUIRED

NoPT for arrivals on LAN VORTAC  
airway radials 324 CW 115.



ELEV 891 216° 4.7 NM from FAF				
TDZE 891				
2500	LAN R-216 110.8	LAN 110.8	PLAST LAN 5 RADAR	VORTAC One Minute Holding Pattern
RW20 LAN 9.7 216° 2500 036° 2500 216°				
4.7 NM 5 NM				
CATEGORY	A	B	C	D
S-20	1400-1	509 (600-1)	1400-1½ 509 (600-1½)	NA
CIRCLING	1460-1 569 (600-1)	1520-1 629 (700-1)	1520-1¾ 629 (700-1¾)	NA

## CHARLOTTE

**FITCH H BEACH** (FPK) 2 NE UTC-5(-4DT) N42°34.47' W84°48.69'

DETROIT

891 B S4 FUEL 100LL NOTAM FILE FPK

L-28J

**RWY 02-20:** H3500X75 (CONC) S-26 MIRL 0.3% up NE

IAP

**RWY 02:** REIL. PAPI(P4L)—GA 4.0' TCH 40'. Trees.

**RWY 20:** REIL. PAPI(P4L)—GA 4.0' TCH 40'. Pole.

**RWY 14-32:** 2318X100 (TURF)

**RWY 14:** Thld dsplcd 575'. Trees.

**RWY 32:** Thld dsplcd 189'. Road.

**AIRPORT REMARKS:** Attended 1300Z—dusk. Military helicopter ops on and in/ov arpt, particularly at ngt. Be alert occasional deer on rwys. Rwy 14-32 CLOSED Dec-Mar and when snow covered. Rwy 14-32 thlds and dsplcd thlds marked with 3' yellow cones.

ACTIVATE MIRL Rwy 02-20; REIL and PAPI Rwy 02 and 20—CTAF.

**WEATHER DATA SOURCES:** AWOS-3 118.075 (517) 543-2288.

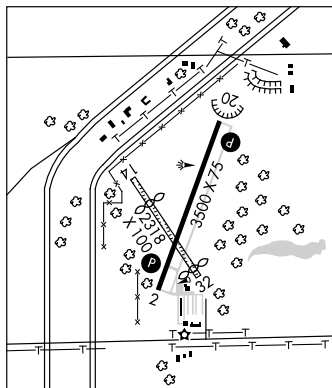
**COMMUNICATIONS:** CTAF/UNICOM 123.0

® **LANSING APP/DEP CON** 118.65

**RADIO AIDS TO NAVIGATION:** NOTAM FILE LAN.

**LANSING (L) VORTACW** 110.8 LAN Chan 45 N42°43.04'

W84°41.85' 216° 9.9 NM to fld. 887/5W.



**WEND VALLEY** (49G) 3 NW UTC-5(-4DT) N42°34.75' W84°54.50'

DETROIT

859 NOTAM FILE LAN

**RWY 18-36:** 1800X100 (TURF)

**RWY 18:** Trees. **RWY 36:** Trees.

**AIRPORT REMARKS:** Attended irregularly. No snow removal on Rwy 18-36. Arpt CLOSED Dec-Mar and when snow covered. Ultralight activity on and in/ov arpt. +30' p-line north end rwy. Rwy 18 and dsplcd thld marked with 3' yellow cones.

**COMMUNICATIONS:** CTAF 122.9

## CHEBOYGAN

**CHEBOYGAN CO** (SLH) 2 W UTC-5(-4DT) N45°39.22' W84°31.16'

LAKE HURON

640 B S4 FUEL 100LL, JET A NOTAM FILE SLH

L-31C

**RWY 10-28:** H4005X75 (ASPH) S-23, D-34, 2D-60 MIRL 0.3% up W

IAP

**RWY 10:** REIL. PAPI(P2L)—GA 4.0' TCH 25'. Road.

**RWY 28:** REIL. PAPI(P2L)—GA 4.0' TCH 25'. Trees.

**RWY 16-34:** 1600X75 (TURF)

**RWY 34:** Thld dsplcd 500'.

**AIRPORT REMARKS:** Attended 1300-2200Z. 100LL 24 hr self-serve. For Jet A after hrs call 231-627-7921, 231-420-0334. Deer and birds on and in/ov arpt. Rwy 16-34 CLOSED Dec-Mar and when snow covered. Rwy 16-34 soft when wet. Rwy 16 rwy and dsplcd thld marked with 3' yellow cones. ACTIVATE MIRL Rwy 10-28, PAPI Rwy 10 and Rwy 28 and REIL Rwy 10 and Rwy 28—122.5.

**WEATHER DATA SOURCES:** AWOS-3 118.175 (231) 627-4671.

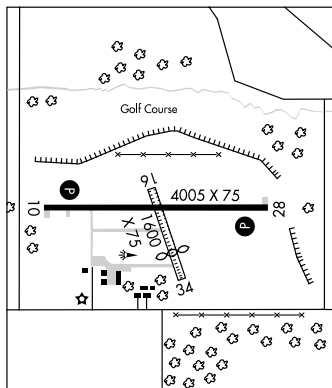
**COMMUNICATIONS:** CTAF/UNICOM 122.8

® **MINNEAPOLIS CENTER APP/DEP CON** 134.6

**RADIO AIDS TO NAVIGATION:** NOTAM FILE PLN.

**PELLSTON (L) VORTACW** 111.8 PLN Chan 55 N45°37.84'

W84°39.85' 083° 6.3 NM to fld. 840/6W. HIWAS



APP CRS	Rwy Idg	<b>4005</b>
<b>096°</b>	TDZE	<b>641</b>
	Apt Elev	<b>641</b>

# RNAV (GPS) RWY 10

## CHEBOYGAN COUNTY (SLH)



**A NA**

If local altimeter setting not received, use Pellston altimeter setting and increase all MDAs 60 feet.  
DME/DME RNP -0.3 NA.  
VDP NA with Pellston altimeter setting.

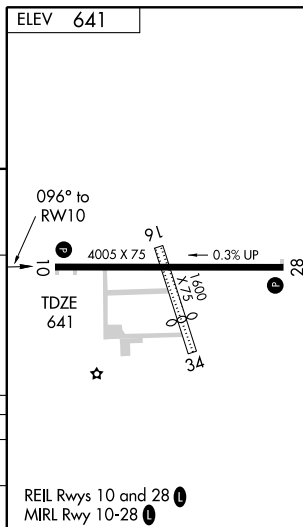
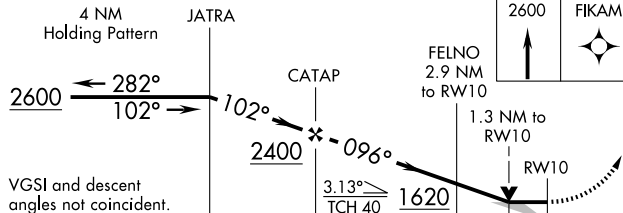
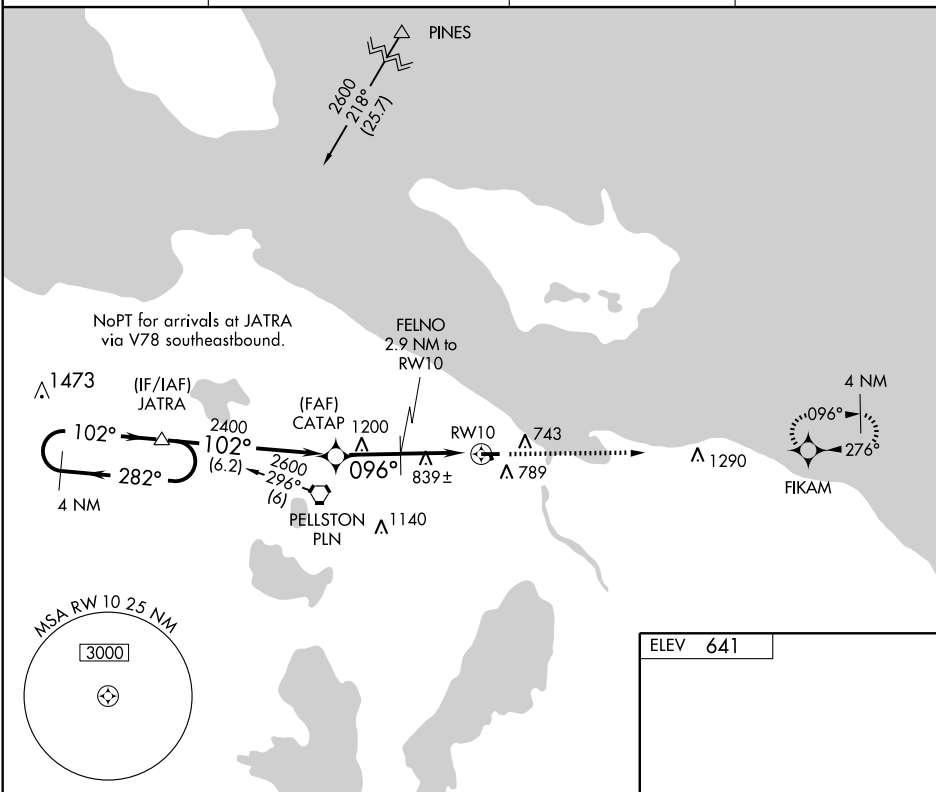
MISSED APPROACH: Climb to 2600  
direct FIKAM and hold.

AWOS-3  
118.175

MINNEAPOLIS CENTER  
134.6 354.05

UNICOM  
122.8 (CTAF)

122.5 L



CHEBOYGAN, MICHIGAN

Amdt 1 10154

45°39'N - 84°31'W

CHEBOYGAN COUNTY (SLH)

RNAV (GPS) RWY 10

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1. 23 SEP 2010 to 21 OCT 2010

APP CRS	Rwy Idg	<b>4005</b>
<b>276°</b>	TDZE	<b>641</b>
	Apt Elev	<b>641</b>

# RNAV (GPS) RWY 28

CHEBOYGAN COUNTY (SLH)

**▽** If local altimeter setting not received, use Pellston altimeter setting and increase all MDAs 60 feet.  
**△ NA** GPS or RNP -0.3 required. DME/DME RNP -0.3 NA.

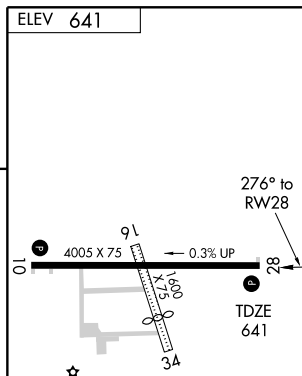
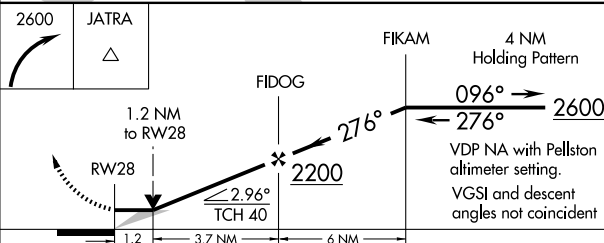
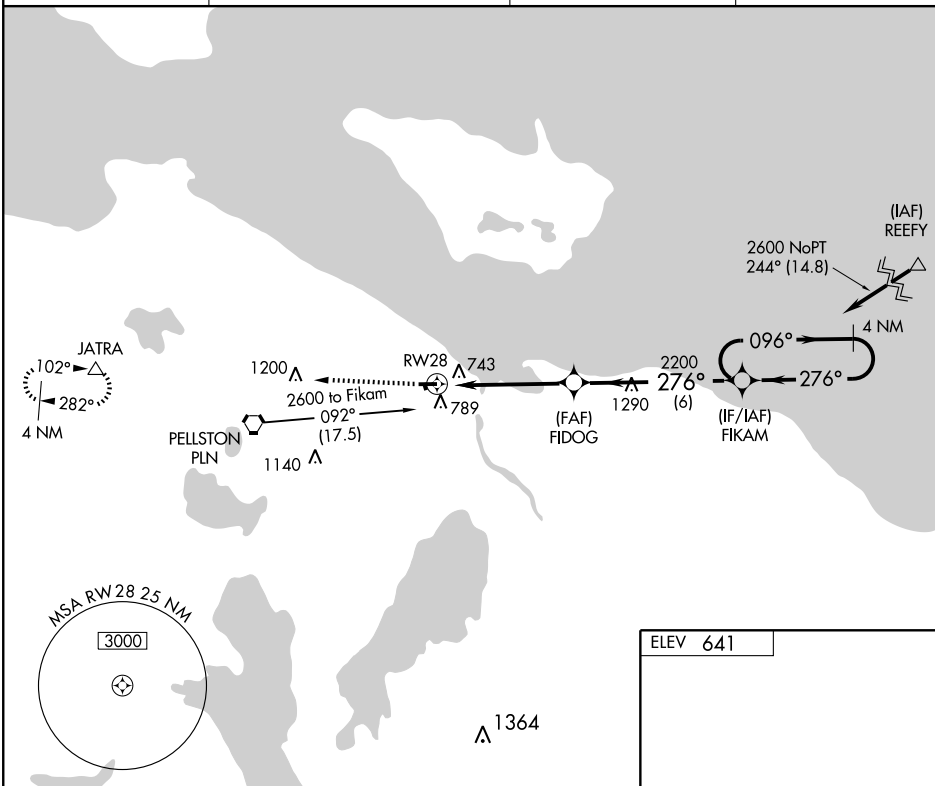
MISSED APPROACH: Climbing right turn to 2600 direct JATRA WP and hold.

AWOS-3  
**118.175**

MINNEAPOLIS CENTER  
**134.6 354.05**

UNICOM  
**122.8 (CTAF)**

**122.5**



CATEGORY	A	B	C	D
LNAV MDA	1060-1	419 (500-1)	1060-1½ 419 (500-1½)	NA
CIRCLING	1140-1	499 (500-1)	1140-1½ 499 (500-1½)	NA

REIL Rwy 10 and 28  
MIRL Rwy 10-28

VORTAC PLN	APP CRS	Rwy Idg	4005
111.8	082°	TDZE	641
Chan 55		Apt Elev	641

# VOR RWY 10

## CHEBOYGAN COUNTY (SLH)

▼ If local altimeter setting not received, use Pellston altimeter setting and increase all MDAs 60 feet.  
 ▲ NA VDP NA when using Pellston altimeter setting.

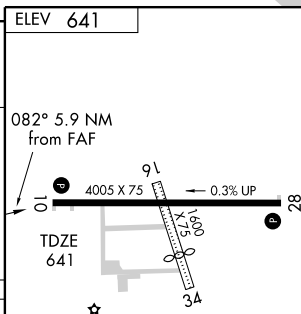
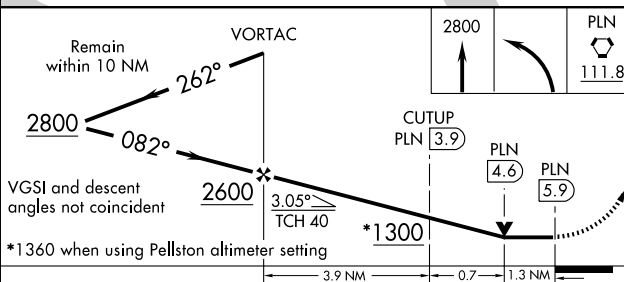
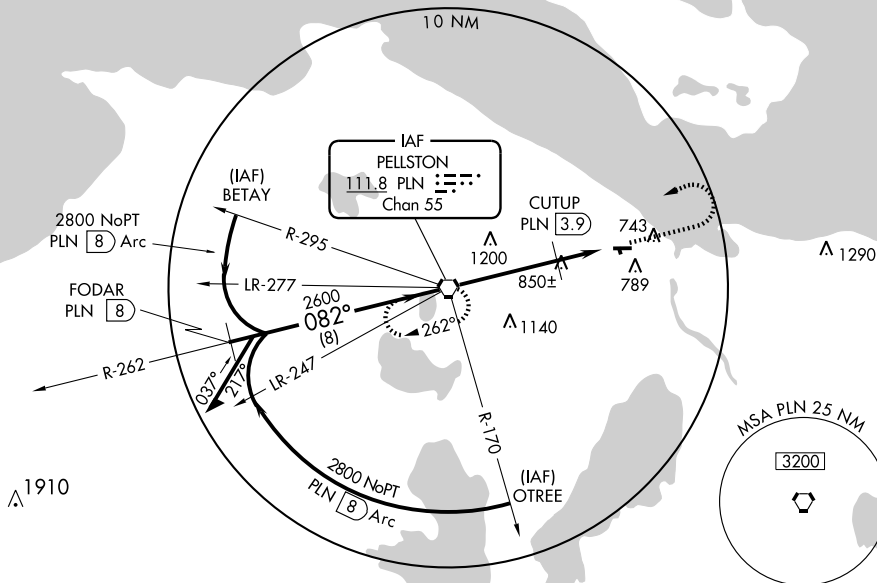
MISSED APPROACH: Climb to 2800 then left turn direct PLN VORTAC and hold.

AWOS-3  
118.175

MINNEAPOLIS CENTER  
134.6 354.05

UNICOM  
122.8 (CTAF)

122.5 0



CATEGORY	A	B	C	D
S-9	1300-1	659 (700-1)	1300-1¾ 659 (700-1¾)	NA
CIRCLING	1300-1	659 (700-1)	1300-1¾ 659 (700-1¾)	NA
DME MINIMUMS				
S-9	1100-1	459 (500-1)	1100-1¼ 459 (500-1¼)	NA
CIRCLING	1140-1	499 (500-1)	1140-1½ 499 (500-1½)	NA

REIL Rwy 10 and 28 0  
MIRL Rwy 10-28 0

FAF to MAP 5.9 NM					
Knots	60	90	120	150	180
Min:Sec	5:54	3:56	2:57	2:22	1:58

**HOFFMAN'S BLACK MOUNTAIN AERODROME** (2M7) 11 SE UTC-5(-4DT)

LAKE HURON

N45°31.92' W84°18.48'

677 S4 NOTAM FILE LAN

RWY 15-33: 2800X90 (TURF)

RWY 15: Thld dspcd 1200'. Trees.

RWY 33: Thld dspcd 900'. Trees.

**AIRPORT REMARKS:** Attended irregularly. Rwy 15-33 ditch on both sides of rwy. Rwy 15-33 soft when wet. Call 231-627-2418 to confirm rwy conditions. Rwy rough, uneven, tire ruts. Rwy 15-33 edges and dspcd thlds are marked with yellow cones.

COMMUNICATIONS: CTAF/UNICOM 122.8

**CHERRY CAPITAL** (See TRAVERSE CITY)**CHESANING****HOWARD NIXON MEML** (50G) 1 W UTC-5(-4DT) N43°10.99' W84°08.00'

DETROIT

644 NOTAM FILE LAN

RWY 18-36: 2582X150 (TURF) LIRL

RWY 18: Thld dspcd 400'. Trees.

RWY 36: Thld dspcd 796'. Trees.

RWY 09-27: 2060X150 (TURF)

RWY 09: Trees.

RWY 27: Thld dspcd 800'. Trees.

**AIRPORT REMARKS:** Attended irregularly. No winter snow removal. Rwy 18-36 marked with 3' yellow cones including dspcd thlds. Rwy 09-27 marked with 3' cones including dspcd thlds. ACTIVATE LIRL Rwy 18-36—CTAF.

COMMUNICATIONS: CTAF 122.9

**CHIPPEWA CO INTL** (See SAULT STE MARIE)**CIRCLE U HELIPORT** (See CARSONVILLE)**CLAM LAKE** N44°53.96' W85°14.38' NOTAM FILE ACB.

GREEN BAY

NDB (MHW) 251 CXK 023° 5.6 NM to Antrim Co. Unmonitored.

L-31B

**CLARE MUNI** (48D) 1 E UTC-5(-4DT) N43°50.07' W84°44.41'

DETROIT

857 B FUEL 100LL NOTAM FILE LAN

L-28J, 31C

RWY 04-22: H3500X75 (ASPH) MIRL 0.9% up NE

IAP

RWY 04: REIL. PAPI(P4L)—GA 4.0° TCH 35'. Trees.

RWY 22: REIL. PAPI(P2L)—GA 3.0° TCH 25'. Trees.

RWY 09-27: H2500X75 (ASPH) S-20 MIRL

RWY 09: Trees. RWY 27: Fence.

**AIRPORT REMARKS:** Attended irregularly. 24 hour self serve fuel avbl with credit card. Deer on and invof arpt. Rwy 22 REIL OTS indef. ACTIVATE MIRL Rwy 04-22, Rwy 09-27, REIL Rwy 04 and Rwy 22 and PAPI Rwy 04 and Rwy 22—CTAF.

COMMUNICATIONS: CTAF/UNICOM 122.8

① SAGINAW APP/DEP CON 126.45 (1130-0400Z)

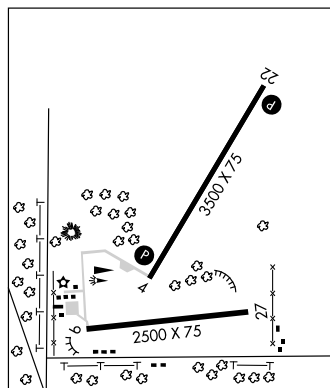
CLEVELAND CENTER APP/DEP CON 127.7 (0400-1130Z)

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

MOUNT PLEASANT (L) VORW/DME 110.6 MOP Chan

43 N43°37.37' W84°44.24' 004° 12.7 NM to fld.

752/5W.

**CLARE CO** (See HARRISON)**CLINTON****HONEY ACRES** (7N4) 1 W UTC-5(-4DT) N42°04.67' W83°59.16'

DETROIT

820 NOTAM FILE LAN

COPTER

RWY 18-36: 3800X90 (TURF)

RWY 18: Thld dspcd 600'. Tree.

RWY 36: Thld dspcd 600'. Bldg.

**AIRPORT REMARKS:** Attended irregularly. Rwy 36, +18' p-line 430' from thld marked with orange balls. Rwy 18-36 thlds and dspcd thlds marked with 3' yellow cones.

COMMUNICATIONS: CTAF 122.9

VOR/DME MOP  
**110.6**  
Chan **43**

APP CRS  
**004°**

Rwy ldg  
TDZE  
Apt Elev

N/A  
N/A  
**857**

**VOR or GPS-A**  
CLARE MUNI (48D)



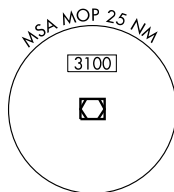
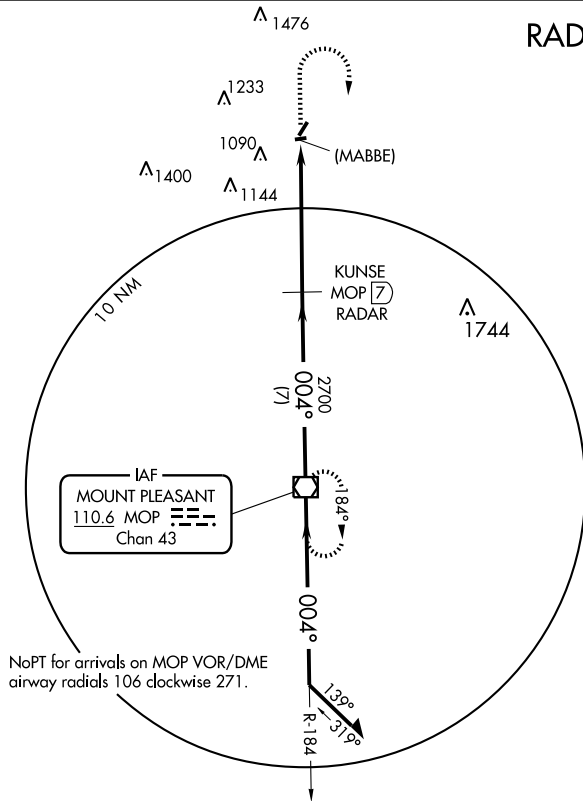
Use Saginaw altimeter setting.

MISSED APPROACH: Climb to 2700, then  
right turn direct MOP VOR/DME and hold.

SAGINAW APP CON ★  
**126.45 235.625**

UNICOM  
**122.8 (CTAF) 0**

**RADAR or DME REQUIRED**



Remain  
within 10 NM

VOR/DME

2700

004°

2700

KUNSE  
MOP 7  
RADAR

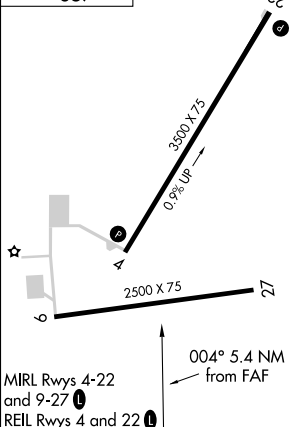
2700



MOP  
**110.6**

(MABBE)  
MOP  
**12.4**

ELEV 857



MIRL Rwy 4-22  
and 9-27

REIL Rwy 4 and 22

004° 5.4 NM  
from FAF

FAF to MAP 5.4 NM

CATEGORY

A

B

C

D

CIRCLING

1580-1

723 (800-1)

NA

Knots

60

90

120

150

180

Min:Sec

5:24

3:36

2:42

2:10

1:48



## CLIO

**CAGNEY** (51G) 3 SW UTC-5(-4DT) N43°08.58' W83°47.75'

DETROIT

722 S4 TPA-1722(1000) NOTAM FILE LAN

RWY 03-21: 1933X100 (TURF)

RWY 03: Trees. RWY 21: Tree.

RWY 14-32: 1895X140 (TURF)

RWY 14: Tree. RWY 32: Trees.

RWY 18-36: 1802X100 (TURF)

RWY 18: Thld dspcd 500'. Trees. RWY 36: Thld dspcd 358'. Trees.

**AIRPORT REMARKS:** Attended continuously. Deer on and invof arpt. Rwy 03-21, Rwy 14-32 and Rwy 18-36 rough.

Glider ops left and rgt t/c to all rws. Rwy 32 apch end wet in spring after rain. Rwy 18-36 marked with yellow cones. Rwy 03-21 and Rwy 14-32 irregularly defined by mowing. Rws 03-21 and 14-32 local use only. Check NOTAMS for rwy condition winter months—no snow removal.

**COMMUNICATIONS:** CTAF 122.9

## COLDWATER

**BRANCH CO MEML** (OEB) 3 W UTC-5(-4DT) N41°56.01' W85°03.14'

CHICAGO

959 B S4 FUEL 100LL, JET A NOTAM FILE OEB

H-5E, 10F, L-281

RWY 07-25: H5350X75 (ASPH) S-20 MIRL

RWY 07: PAPI(P2L)—GA 3.0° TCH 32'. Trees.

RWY 25: REIL. PAPI(P2L)—GA 3.0° TCH 40'. Road.

RWY 04-22: H3500X75 (ASPH) S-18 MIRL

RWY 04: Tree. RWY 22: Tree.

RWY 16-34: 2400X190 (TURF)

RWY 16: Thld dspcd 595'. Trees. RWY 34: Trees.

**AIRPORT REMARKS:** Attended irregularly. Deer on and invof arpt. 24 hr self svc fuel with major credit card. Rwy 07-25 plowed winter months. Check arpt manager at 517-617-7145 for conditions. Admin building access—depress V, then simultaneous III-II, then I. Preferred calm wind Rwy 25. ACTIVATE MIRL Rwy 04-22 and Rwy 07-25 and REIL Rwy 25—CTAF. Rwy 16 and dspcd thld marked with 3' yellow cones.

**WEATHER DATA SOURCES:** AWOS-3 118.125 (517) 279-1810.

**COMMUNICATIONS:** CTAF/UNICOM 122.7

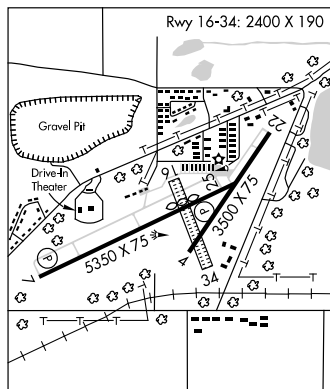
LITCHFIELD RCO 122.1R 111.2T (LANSING RADIO)

Ⓡ KALAMAZOO APP/DEP CON 121.2 (1100-0400Z)

Ⓡ CHICAGO CENTER APP/DEP CON 127.55 (0400-1100Z)

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

LITCHFIELD (L) VOR/DME 111.2 LFD Chan 49 N42°03.75' W84°45.91' 244° 15 NM to fld. 1040/05W.



**COLEMAN A. YOUNG MUNI** (See DETROIT)

**COWLEY FLD** (See SANDUSKY)

## CROSWELL

**ARNOLD FLD** (55G) 2 NE UTC-5(-4DT) N43°17.87' W82°36.40'

DETROIT

780 NOTAM FILE LAN

RWY 18-36: 2585X140 (TURF)

RWY 18: Thld dspcd 500'. Trees. RWY 36: Thld dspcd 470'. P-line.

RWY 07-25: 2570X75 (TURF)

RWY 07: Thld dspcd 540'. P-line. RWY 25: Trees.

**AIRPORT REMARKS:** Unattended. Arpt CLOSED Nov-Mar. Winter ops skis only. Rwy 18-36 marked with cones, dspcd thld marked three 12 inch yellow cones each side. Rwy 07 dspcd thld marked with 3' boards, Rwy 07-25 thlds defined by mowing.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

WAAS CH <b>56506</b> <b>W07A</b>	APP CRS <b>069°</b>	Rwy Idg <b>5350</b> TDZE <b>959</b> Apt Elev <b>959</b>
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## RNAV (GPS) RWY 7

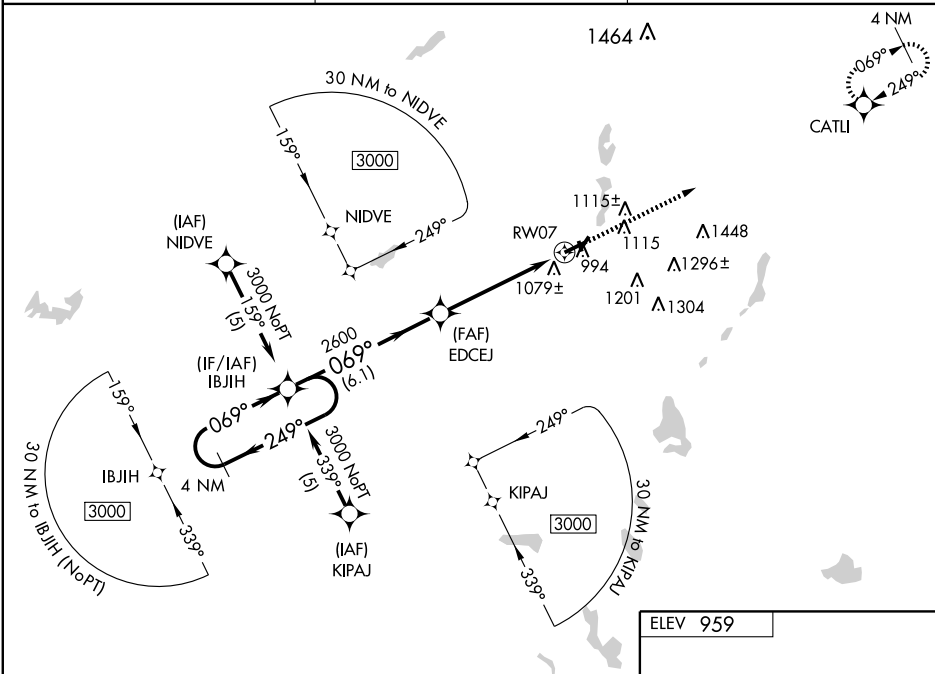
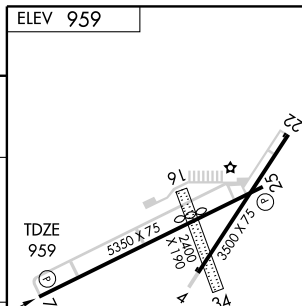
COLDWATER/BRANCH COUNTY MEMORIAL (OEB)

- T** When local altimeter setting not received, use Sturgis altimeter setting and increase all DAs 48 feet and LPV visibility  $\frac{1}{4}$  mile all CATs and all MDAs 60 feet and LNAV Cat C visibility  $\frac{1}{4}$  mile. Baro-VNAV NA when using Sturgis altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. Circling to Rwy 16-34 NA.

**MISSED APPROACH:**  
Climb to 3000 direct  
CATU and hold.

AWOS-3  
118.125

KALAMAZOO APP CON ★  
121.2 340.9

UNICOM  
122.7 (CTAF) **L**[illegible]

CATEGORY	A	B	C	D
LPV DA	1307-1¼	348 (400-1¼)		NA
LNAV/ VNAV DA	1418-1¾	459 (500-1¾)		NA
LNAV MDA	1420-1	461 (500-1)	1420-1¼ 461 (500-1¼)	NA
CIRCLING	1420-1	461 (500-1)	1480-1½ 521 (600-1½)	NA

MIRL Rwy 4-22 and 7-25 **L**  
REIL Rwy 25 **L**

WAAS CH <b>99606</b> <b>W25A</b>	APP CRS <b>249°</b>	Rwy Idg TDZE Apt Elev	<b>5350</b> <b>959</b> <b>959</b>
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## RNAV (GPS) RWY 25

COLDWATER / BRANCH COUNTY MEMORIAL (OEB)

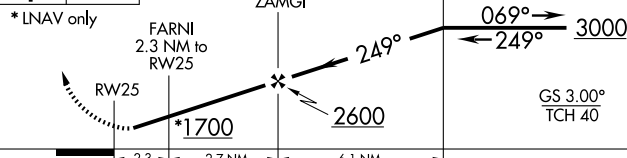
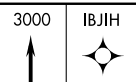
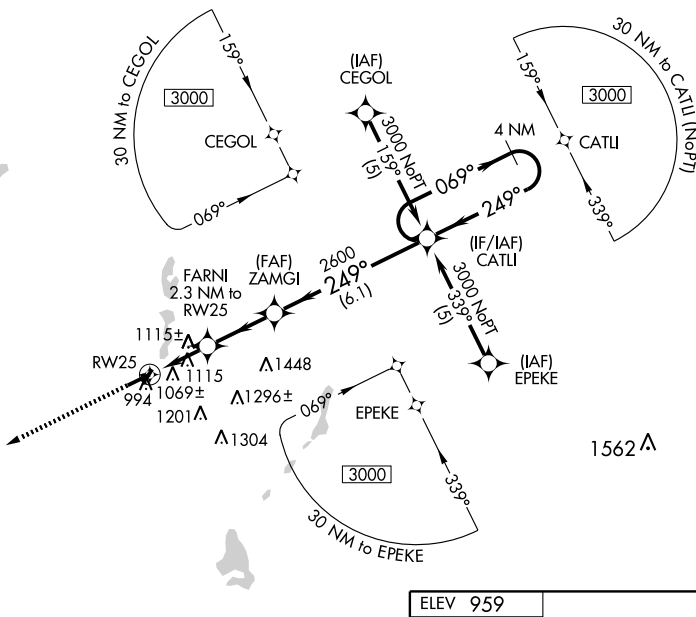
When local altimeter setting not received, use Sturgis altimeter setting and increase all DAs 48 feet and LPV visibility  $\frac{1}{4}$  mile all Cats and all MDAs 60 feet and LNAV Cat C visibility  $\frac{1}{4}$  mile. Baro-VNAV NA when using Sturgis altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. Circling to Rwy 16-34 NA.

MISSED APPROACH:  
Climb to 3000 direct  
IBJIH and hold.

AWOS-3  
**118.125**

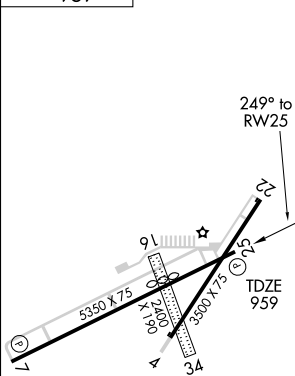
KALAMAZOO APP CON ★  
**121.2 340.9**

UNICOM  
**122.7 (CTAF) 0**



CATEGORY	A	B	C	D
LPV DA	1306-1 $\frac{1}{4}$	347 (400-1 $\frac{1}{4}$ )		NA
LNAV/VNAV DA	1424-1 $\frac{1}{4}$	465 (500-1 $\frac{1}{4}$ )		NA
LNAV MDA	1420-1	461 (500-1)	1420-1 $\frac{1}{4}$ 461 (500-1 $\frac{1}{4}$ )	NA
CIRCLING	1420-1	461 (500-1)	1480-1 $\frac{1}{2}$ 521 (600-1 $\frac{1}{2}$ )	NA

ELEV 959



MIRL Rwy 4-22 and 7-25 0  
REIL Rwy 25 0

VOR/DME LFD  
**111.2**  
Chan **49**

APP CRS  
244°

Rwy Idg	<b>5350</b>
TDZE	<b>959</b>
Apt Elev	<b>959</b>

VOR/DME RWY 25

COLDWATER/ BRANCH COUNTY MEMORIAL (OEB)

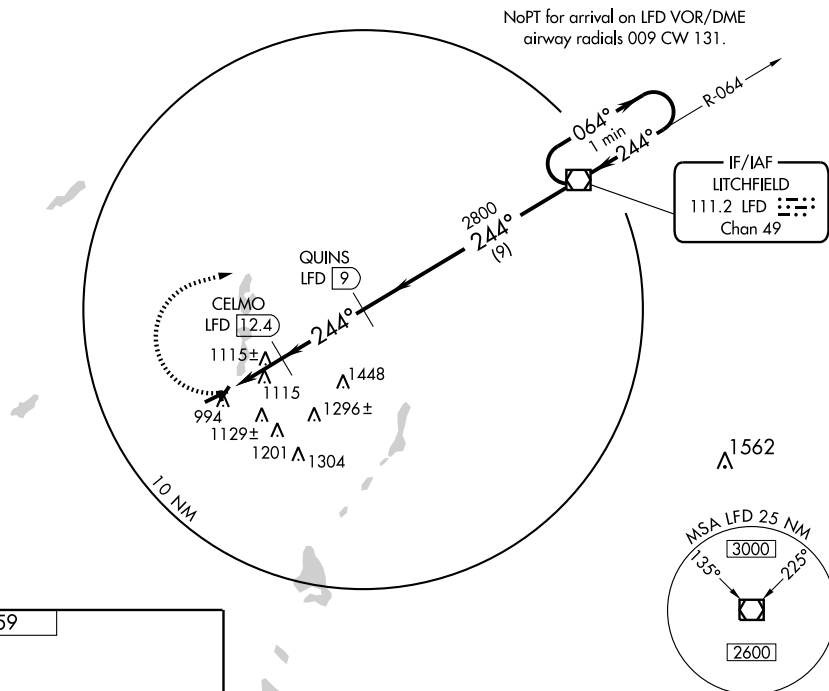


When local altimeter setting not received, use Sturgis altimeter setting and increase all MDAs 60 feet and S-25 Cat C visibility  $\frac{1}{4}$  mile. Circling to Rwy 16-34 NA. Visibility reduction by helicopters NA.

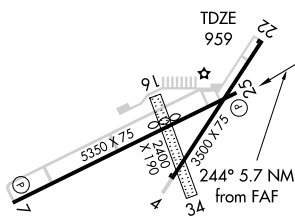
**MISSED APPROACH:** Climbing right turn to 2800 direct LFD VOR/DME and hold.

AWOS-3  
118.125

KALAMAZOO APP CON ★  
121.2 340.9

UNICOM  
122.7 (CTAF) **L**

ELEV 959



MIRL Rwy 4-22 and 7-25 **L**  
REIL Rwy 25 **L**

COLDWATER/ BRANCH COUNTY MEMORIAL (OEB)

Orig 10042

41°56'N - 85°03'W

VOR/DME RWY 25

VOR/DME LFD <b>111.2</b> Chan <b>49</b>	APP CRS <b>064°</b>	Rwy Idg TDZE Apt Elev <b>5350</b> <b>959</b> <b>959</b>
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# VOR RWY 7

COLDWATER / BRANCH COUNTY MEMORIAL (OEB)

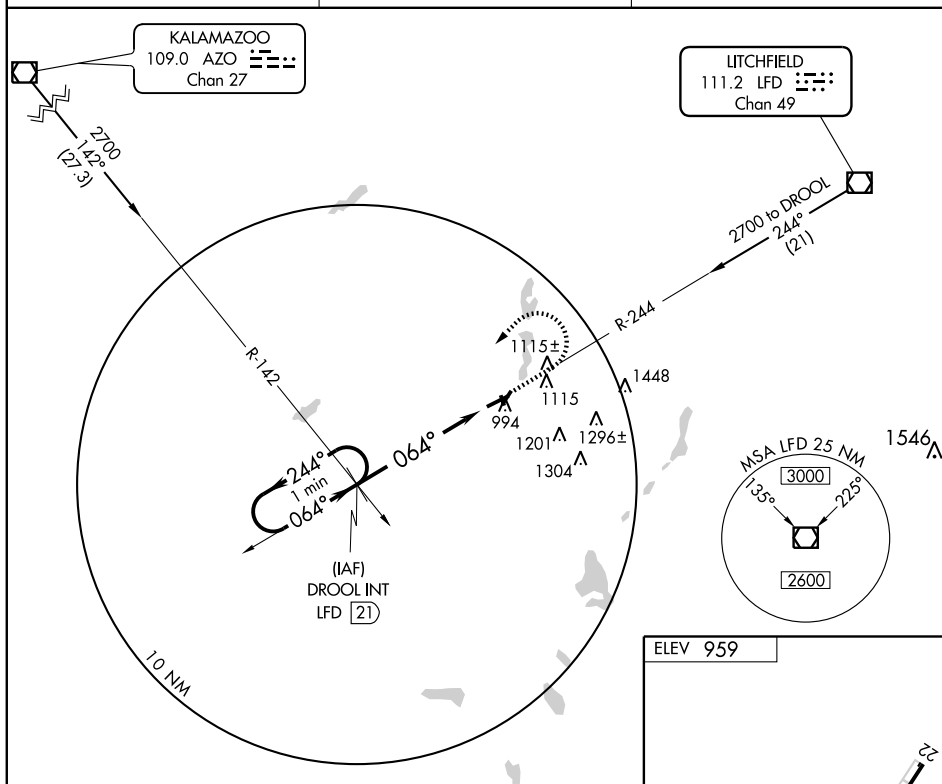
▼ When local altimeter setting not received, use Sturgis altimeter setting and increase all MDAs 60 feet and S-7 Cat C visibility  $\frac{1}{4}$  mile.  
 ▲ Circling to Rwy 16-34 NA. Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 2000 then climbing left turn to 2700 via heading 205° and LFD R-244 to DROOL INT/LFD 21 DME and hold.

AWOS-3  
**118.125**

KALAMAZOO APP CON ★  
**121.2 340.9**

UNICOM  
**122.7 (CTAF) 0**



One Minute  
Holding Pattern

DROOL INT  
LFD (21)

2000

2700

LFD  
R-244  
111.2

DROOL INT

2700 ← 244°  
064° →

VGSI and descent angles  
not coincident.

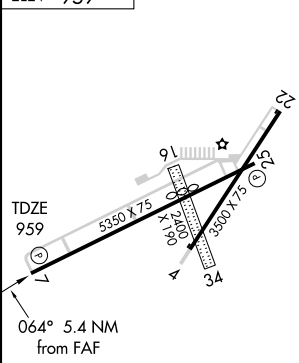
2.96°  
TCH 40

064°

LFD  
15.6

5.4 NM

ELEV 959



MIRL Rwy 4-22 and 7-25 0

REIL Rwy 25 0

FAF to MAP 5.4 NM

Knots	60	90	120	150	180
Min:Sec	5:24	3:36	2:42	2:10	1:48

## CRYSTAL FALLS

IRON CO (5ØD) 6 SE UTC-6(-5DT) N46°00.54' W88°16.44'

1340 B NOTAM FILE GRB

RWY 12-30: H3690X50 (ASPH) MIRL (NSTD)

RWY 12: Trees RWY 30: Trees

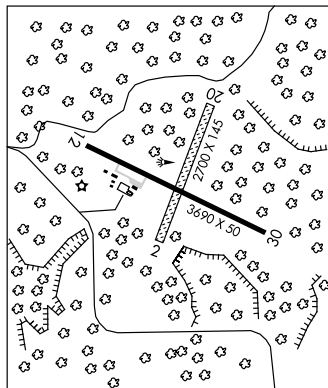
RWY 02-20: 2700X145 (TURF)

RWY 02: Trees RWY 20: Trees

**AIRPORT REMARKS:** Unattended. No snow removal. Deer on and in/ovf arpt. Rwy 12-30 has crumbled, has numerous cracks and vegetation in pavement. Rwy 12-30 numerous cracks in pavement. Rwy 02-20 MIRL NSTD; 36' from rwy edge. Rwy 02 also 92' tree; 2300' distance; apch ratio 25:1, based on straight out. ACTIVATE NSTD MIRL Rwy 12-30—121.7. Rwy 02-20 marked with 3' yellow cones. Rwy paint markings have failed.

**COMMUNICATIONS:** CTAF 122.9**RADIO AIDS TO NAVIGATION:** NOTAM FILE IMT.

IRON MOUNTAIN (L) VOR/DME 111.2 IMT Chan 49 N45°48.96' W88°06.73' 332° 13.4 NM to fld. 1128/2W.



GREEN BAY

L-31A

CUSTER (See MONROE)

DALTON (See FLUSHING)

DAVID'S LANDING (See ST CLAIR)

## DAVISON

ATHELONE WILLIAMS MEML (6GØ) 1 W UTC-5(-4DT) N43°01.75' W83°31.78'

780 NOTAM FILE LAN

RWY 08-26: H3469X40 (ASPH) MIRL (NSTD)

RWY 08: Thld dsplcd 170'. P-line.

RWY 26: Thld dsplcd 368'. P-line.

**AIRPORT REMARKS:** Unattended. Rwy 08-26 surface cracked, peeling, rough and has loose asphalt. Rwy 08-26-4' drainage ditch 60' left and right of rwy centerline along entire length. Rwy 08-26 NSTD MIRL; lgts located 20' from rwy edge.

**COMMUNICATIONS:** CTAF 122.9

FLINT RCO 122.3 (LANSING RADIO)

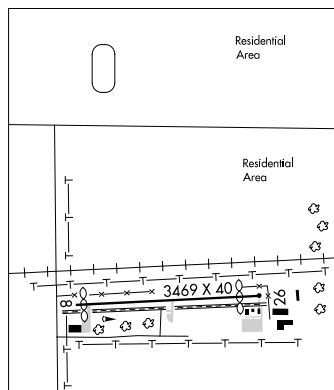
⑤ **FLINT APP/DEP CON** 128.55 (N/W of active rwy) 118.8 (E/S of active rwy) (1045-0430Z†)

CLEVELAND CENTER APP/DEP CON 126.75 (0430-1045Z†)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE FNT.

FLINT (H) VORTACW 116.9 FNT Chan 116 N42°58.01' W83°44.82' 075° 10.3 NM to fld. 772/6W.

**COMM/NAV/WEATHER REMARKS:** APP CON sectorization based upon Flint rwy usage



DETROIT

L-28J

IAP

## DECKERVILLE

INDIAN CREEK RANCH (56G) 5 NE UTC-5(-4DT) N43°34.66' W82°38.86'

745 NOTAM FILE LAN

RWY 09-27: 3569X100 (TURF)

RWY 09: Tank. RWY 27: P-line.

RWY 18-36: 2390X100 (TURF)

RWY 18: Trees. RWY 36: Road.

**AIRPORT REMARKS:** Unattended. Arpt CLOSED Nov 1 to Apr 1. Rwy 18-36 CLOSED indef. Rws soft in spring.

Numerous deer on and in/ovf arpt. Rwy 09-27 and Rwy 18-36 surface rough with irregular mowing. Rwy 09-27 and Rwy 18-36 defined by mowing. Rwy 36 thld marked with 3 cones each side.

**COMMUNICATIONS:** CTAF 122.9

DETROIT

DELTA CO (See ESCANABA)

APP CRS  
092°

Rwy Idg	<b>3299</b>
TDZE	<b>780</b>
Apt Elev	<b>780</b>

## RNAV (GPS) RWY 8

DAVISON / ATHELONE WILLIAMS MEMORIAL (6G0)



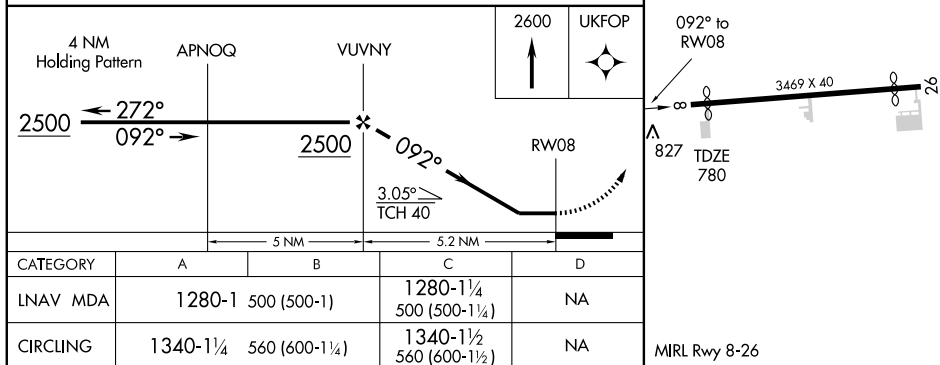
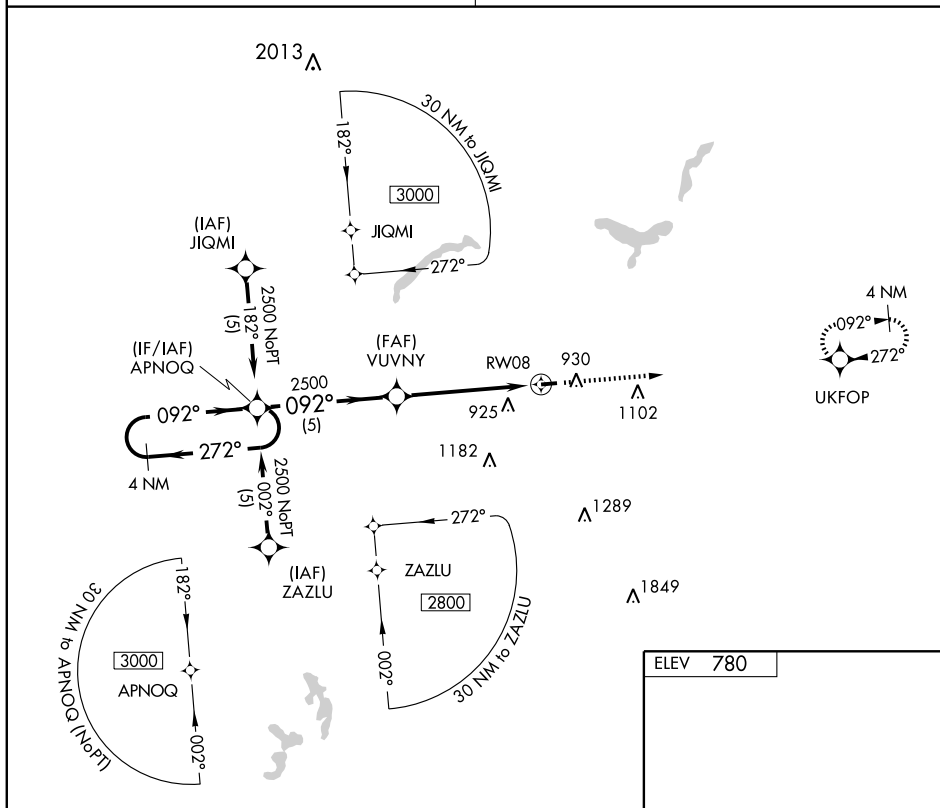
A NA

Use Flint altimeter setting.  
DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 2600  
direct UKFOP WP and hold.

FLINT APP CON ★  
118.8 257.9

CTAF  
**122.9**



DAVISON, MICHIGAN

Orig-A 09295

DAVISON / ATHELONE WILLIAMS MEMORIAL (6G0)

43°02'N - 83°32'W

RNAV (GPS) RWY 8

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1. 23 SEP 2010 to 21 OCT 2010

APP CRS  
**272°**

Rwy Idg  
TDZE  
Apt Elev

**3101**  
**780**  
**780**

# RNAV (GPS) RWY 26

DAVISON / ATHELONE WILLIAMS MEMORIAL (6G0)



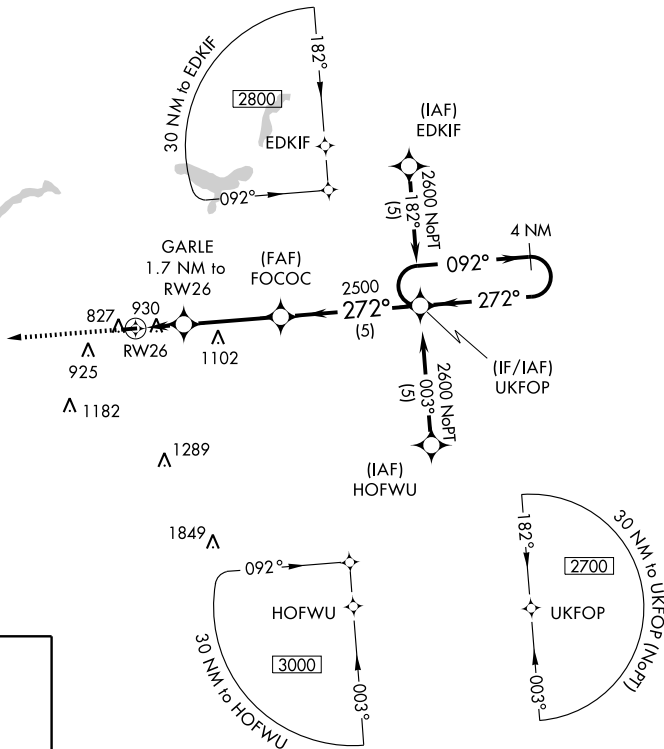
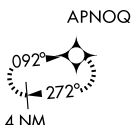
Use Flint altimeter setting.  
DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 2500  
direct APNOQ WP and hold.

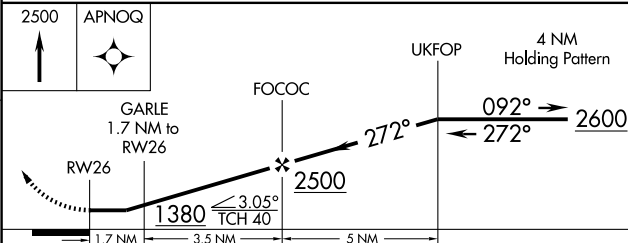
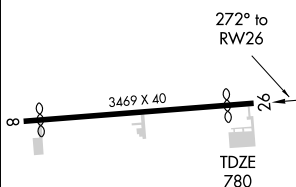
FLINT APP CON ★  
**118.8 257.9**

CTAF  
**122.9**

Λ  
2013



ELEV 780



CATEGORY	A	B	C	D
LNAV MDA	1280-1	500 (500-1)	1280-1½ 500 (500-1½)	NA
CIRCLING	1340-1½	560 (600-1½)	1340-1½ 560 (600-1½)	NA

MIRL Rwy 8-26

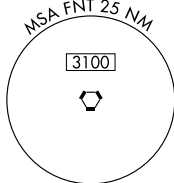
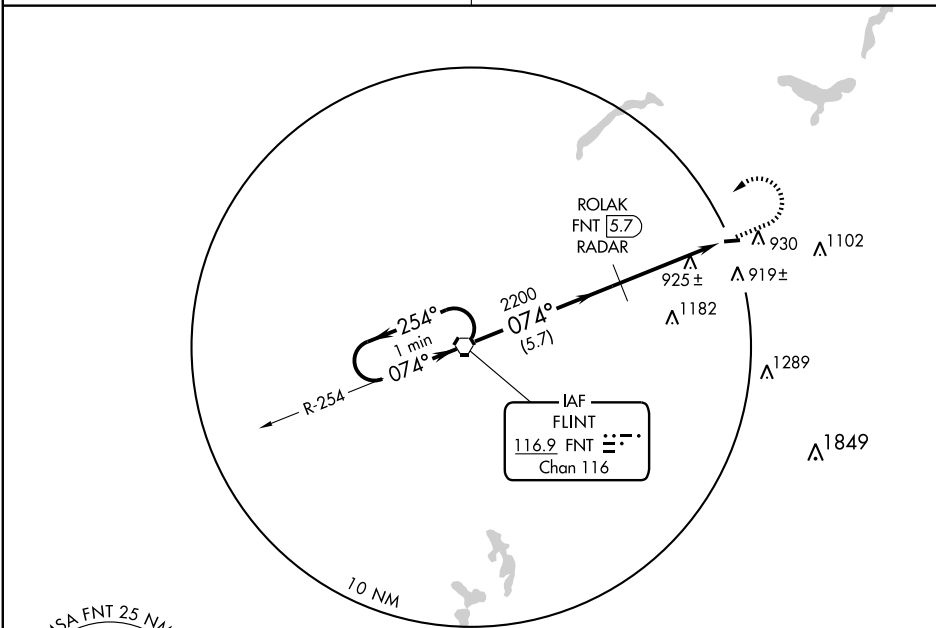


VORTAC FNT <b>116.9</b> Chan <b>116</b>	APP CRS <b>074°</b>	Rwy Idg TDZE Apt Elev	<b>3299</b> <b>780</b> <b>780</b>
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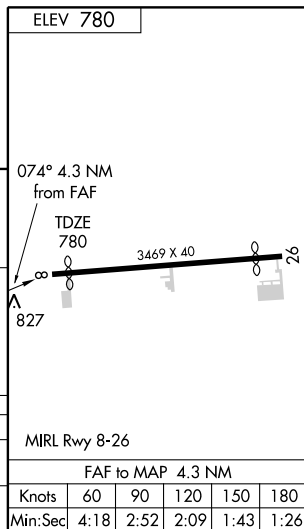
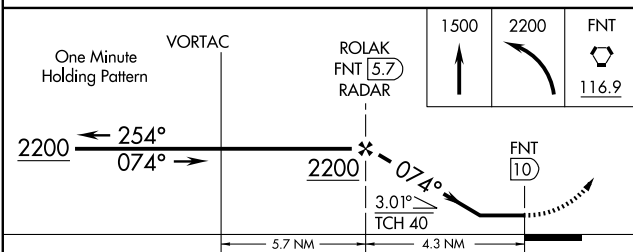
**VOR RWY 8**

DAVISON / ATHELONE WILLIAMS MEMORIAL (6G0)

<p>▼ ▲ NA</p> <p>Use Flint altimeter setting.</p>	<p>MISSED APPROACH: Climb to 1500, then climbing left turn to 2200 direct FNT VORTAC and hold.</p>
<p>FLINT APP CON ★ <b>118.8 257.9</b></p>	<p>CTAF <b>122.9</b></p>



**DME OR RADAR REQUIRED**



CATEGORY	A	B	C	D
S-8	1280-1	500 (500-1)	1280-1 ¼ 500 (500-1 ¼)	NA
CIRCLING	1340-1	560 (600-1)	1340-1 ½ 560 (600-1 ½)	NA

DAVISON, MICHIGAN

Orig-C 06MAY10

DAVISON / ATHELONE WILLIAMS MEMORIAL (6G0)

43°02'N - 83°32'W

**VOR RWY 8**

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010

10210

## AIRPORT DIAGRAM

AL-118 (FAA)

DETROIT/ COLEMAN A. YOUNG MUNI (DET)  
DETROIT, MICHIGAN

ATIS  
124.875  
DETROIT CITY TOWER  
121.3 257.8  
GND CON  
121.85

ELEV  
624

42°25.0' N

JANUARY 2010  
ANNUAL RATE OF CHANGE  
0.0°W

CAUTION: BE ALERT TO RUNWAY  
CROSSING INSTRUCTIONS.  
READBACK OF ALL RUNWAY HOLDING  
INSTRUCTIONS IS REQUIRED.

42°24.5' N

CONTROL  
TOWER  
714

U.S. CUSTOMS

AIRLINE  
TERMINAL

ELEV  
622

LAHSO

EXECUTIVE  
TERMINAL

4025 X 100

CARGO AREA

RWY 07-25

S-12.5

RWY 15-33

S-75, D-135, 2S-120

FIELD  
ELEV  
626

42°24.0' N

83°01.0' W

83°00.5' W

83°00.0' W

## AIRPORT DIAGRAM

DETROIT, MICHIGAN

DETROIT/ COLEMAN A. YOUNG MUNI (DET)

10210

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010

## DETROIT

**COLEMAN A. YOUNG MUNI** (DET) 5 NE UTC-5(-4DT) N42°24.55' W83°00.59'

626 B FUEL 100LL, JET A OX 1, 2, 3 AOE NOTAM FILE DET

RWY 15-33: H5090X100 (ASPH - GRVD) S-75, D-135, 2S-120 HIRL

RWY 15: REIL. VASI(V2R)—GA 3.0° TCH 56'. Trees.

RWY 33: REIL. PAPI(P4L)—GA 3.0° TCH 49'. Trees.

RWY 07-25: H4025X100 (ASPH) S-12.5 MIRL

RWY 07: Thld dsplcd 715'. Railroad.

RWY 25: PAPI(P4L)—GA 4.0° TCH 40'. Thld dsplcd 716'. Pole.

#### LAND AND HOLD SHORT OPERATIONS

LANDING	HOLD SHORT POINT	DIST AVBL
RWY 15	07-25	4900

**AIRPORT REMARKS:** Attended continuously. Birds on and invof arpt.

Unlighted twr 275' AGL 1 mile WSW. Loading/Unloading Class A explosives or poisons not permitted. PPR for Class B and C explosives. Due to noise abatement requirements jets and acft over 12,500 lbs GWT must use Rwy 15-33 except when winds exceed 25 knots, then Rwy 07-25 avbl. Twy D1 clsd indef. Ldg fee for acft 6000 lbs or more. Rwy 33 REIL OTS indef. HIRL Rwy 15-33 step five OTS indef. Rwy 15 VASI OTS indef. Flight Notification Service (ADCUS) avbl.

**WEATHER DATA SOURCES:** ASOS (313) 371-9696.

**COMMUNICATIONS:** ATIS 124.875 UNICOM 122.95

RCO 122.2 122.55 (LANSING RADIO)

Ⓡ DETROIT APP/DEP CON 126.85

TOWER 121.3 GND CON 121.85

**RADIO AIDS TO NAVIGATION:** NOTAM FILE YQG.

WINDSOR ONT VOR/DME 113.8 YQG Chan 85 N42°14.99' W82°49.73' 326° 12.5 NM to fld. 620/6W.

MADDS NDB (LOM) 338 DE N40°29.69' W83°05.60' 149°6.3 NM to fld. Unmonitored.

CARGL NDB (MHW/LOM) 230 VQ N42°21.38' W82°57.26' 327° 4 NM to fld. NOTAM FILE DET.

ILS 111.3 I-DET Rwy 15. LOM MADDS NDB.

ILS 111.3 I-VQM Rwy 33. LOM CARGL NDB.

DETROIT

COPTER

H-10G, L-28J, A

IAP, AD



## AKRON TWO DEPARTURE

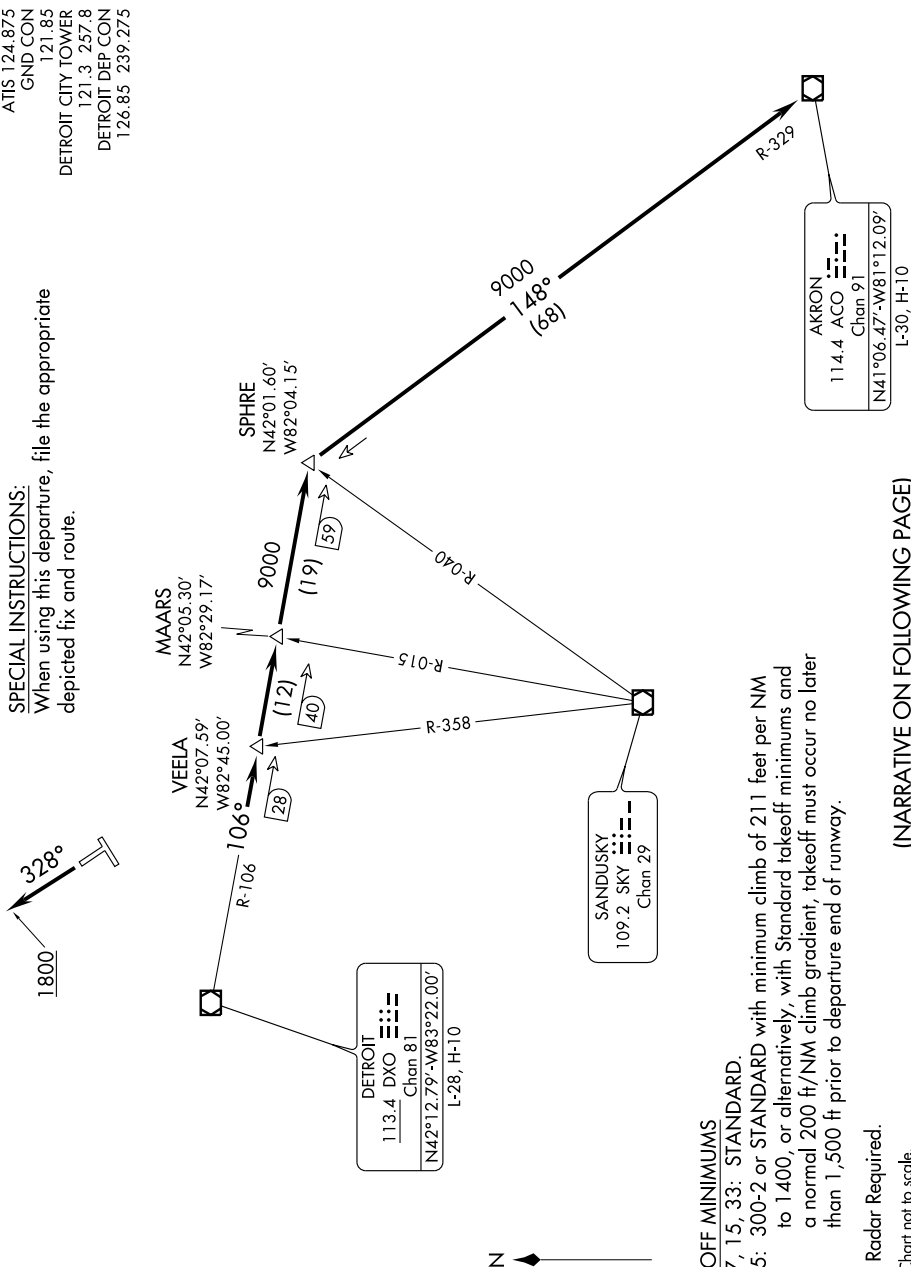
DETROIT/ COLEMAN A. YOUNG MUNI (DET)  
SL-118 (FAA)

DETROIT, MICHIGAN

ATIS 124.875  
GND CON 121.85  
DETROIT CITY TOWER 121.3  
DETROIT DEP CON 126.85  
239.275

## SPECIAL INSTRUCTIONS:

When using this departure, file the appropriate depicted fix and route.



(NARRATIVE ON FOLLOWING PAGE)

## AKRON TWO DEPARTURE



## DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 33: Climb heading 328° to 1800 before turning, expect radar vectors, thence. . . .

TAKE-OFF ALL OTHER RUNWAYS: Climb via assigned heading for radar vectors, thence. . . .

. . . .to intercept DXO VOR/DME R-106 to SPHRE INT, then via ACO R-329 to ACO VOR/DME. Maintain 3000 feet, expect clearance to filed altitude/flight level ten (10) minutes after departure.

TAKE-OFF OBSTACLES

Rwy 7: Multiple Trees beginning 232' from DER, 20' left of centerline, up to 60' AGL/687' MSL.

Multiple Trees beginning 283' from DER, 44' right of centerline, up to 56' AGL/680' MSL.

Stack 533' from DER, 66' right of centerline, 50' AGL/671' MSL.

OL on Stack on Bldg 566' from DER, 18' right of centerline, 50' AGL/671' MSL.

OL on Floodlight 622' from DER, 104' left of centerline, 41' AGL/668' MSL.

Light Standard 149' from DER, 138' left of centerline, 37' AGL/654' MSL.

Light Standard 227' from DER, 105' right of centerline, 33' AGL/654' MSL.

Antenna on Bldg 936' from DER, 84' right of centerline, 43' AGL/670' MSL.

OL on Floodlight 909' from DER, 96' right of centerline, 41' AGL/668' MSL.

Pole 466' from DER, 198' right of centerline, 30' AGL/654' MSL.

OL on Pole 132' from DER, on centerline, 16' AGL/637' MSL.

Rwy 15: Multiple Trees beginning 589' from DER, 221' left of centerline, up to 69' AGL/683' MSL.

Multiple Trees beginning 299' from DER, 289' right of centerline, up to 52' AGL/679' MSL.

Ant on APBN 662' from DER, 667' left of centerline, 81' AGL/695' MSL.

Pipe on Bldg 783' from DER, 597' left of centerline, 62' AGL/676' MSL.

OL on Bldg 1473' from DER, 556' right of centerline, 68' AGL/692' MSL.

Tower 3,376' from DER, 1,118' right of centerline, 103' AGL/723' MSL.

Antenna on Bldg 803' from DER, 522' right of centerline, 35' AGL/656' MSL.

Building 3,749' from DER, 569' left of centerline, 114' AGL/723' MSL.

Floodlight on Bldg 1,611' from DER, 657' left of centerline, 53' AGL/667' MSL.

Rod on OL Building 450' from DER, 317' left of centerline, 20' AGL/637' MSL.

Rwy 25: Tower 2,828' from DER, 1,225' left of centerline, 141' AGL/770' MSL.

Multiple Trees beginning 909' from DER, 133' left of centerline, up to 76' AGL/703' MSL.

Multiple Trees beginning 334' from DER, 132' right of centerline, 58' AGL/685' MSL.

OL on Building 48' from DER, 240' left of centerline, 41' AGL/662' MSL.

Railroad 1' from DER, 126' left of centerline, 29' AGL/650' MSL.

OL on Stack 454' from DER, 45' left of centerline, 35' AGL/659' MSL.

Railroad 190' from DER, 40' left of centerline, 29' AGL/650' MSL.

OL Stack on Bldg 949' from DER, 44' left of centerline, 41' AGL/668' MSL.

Stack 958' from DER, 12' left of centerline, 41' AGL/668' MSL.

Light Standard 701' from DER, 145' right of centerline, 26' AGL/653' MSL.

Stack 9,474' from DER, 2,415' left of centerline, 241' AGL/872' MSL.

Rwy 33: Multiple Trees beginning 113' from DER, 118' left of centerline, up to 73' AGL/694' MSL.

Multiple Trees beginning 572' from DER, 84' right of centerline, up to 92' AGL/709' MSL.

Flag Pole 963' from DER, 379' left of centerline, 28' AGL/658' MSL.

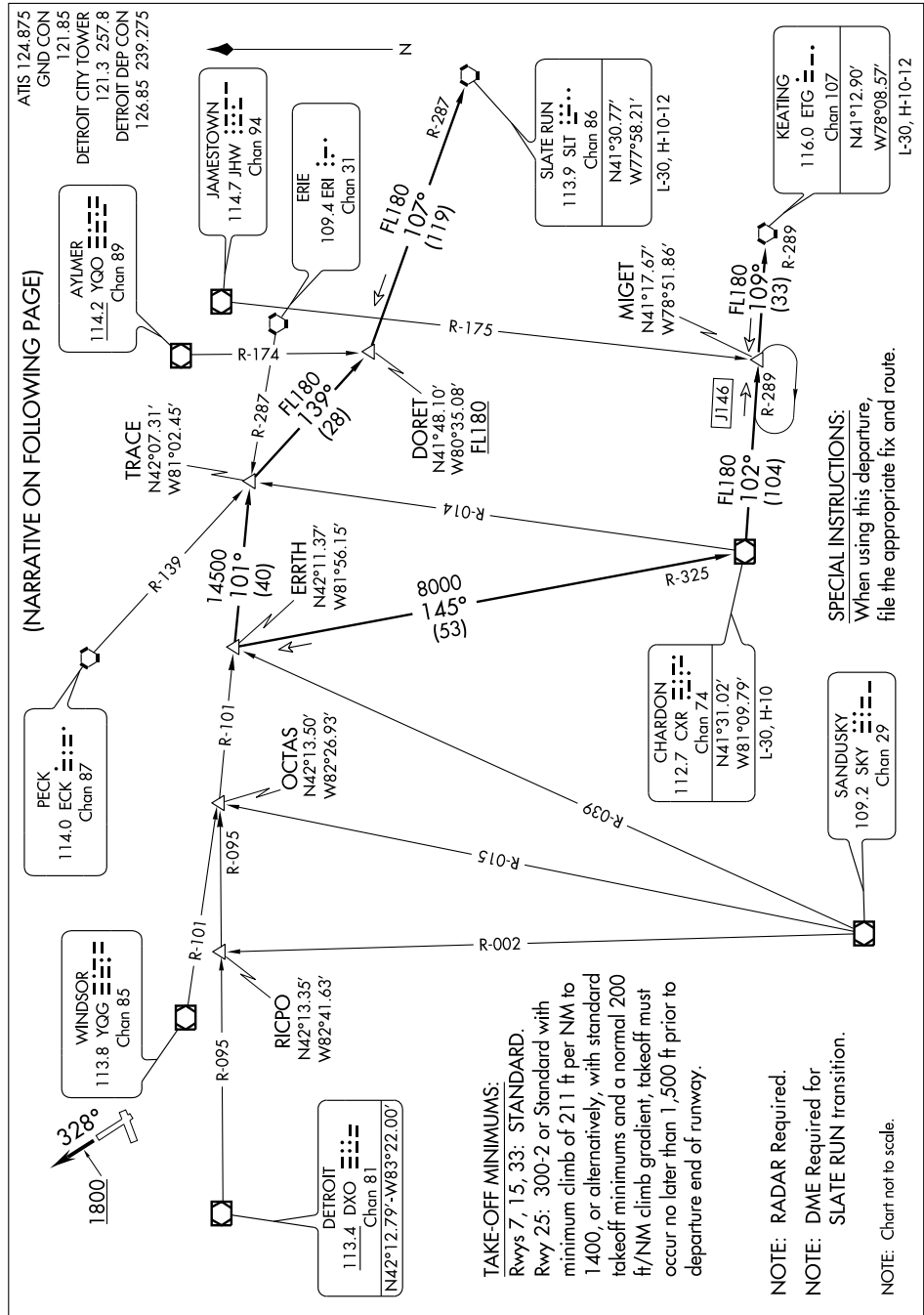
# ERRTH TWO DEPARTURE

SL-118 (FAA)

DETROIT /COLEMAN A. YOUNG MUNI (DET)

DETROIT, MICHIGAN

EC-1, 23 SEP 2010 to 21 OCT 2010



# ERRTH TWO DEPARTURE

DETROIT, MICHIGAN

DETROIT /COLEMAN A. YOUNG MUNI (DET)

EC-1, 23 SEP 2010 to 21 OCT 2010

## ERRTH TWO DEPARTURE

SL-118 (FAA)

DETROIT, MICHIGAN

## DEPARTURE ROUTE DESCRIPTION



TAKE-OFF RWY 33: Climb heading 328° to 1800 expect radar vectors to join the assigned SID. Maintain 3000 feet, expect clearance to filed altitude/flight level ten (10) minutes after departure.

TAKE-OFF ALL OTHER RUNWAYS: Climb via assigned heading for radar vectors to join the assigned SID. Maintain 3000 feet, expect clearance to filed altitude/flight level ten (10) minutes after departure.

CHARDON TRANSITION (ERRTH2.CXR): From over ERRTH INT via CXR R-325 to CXR VOR/DME.

KEATING TRANSITION (ERRTH2.ETG): From over ERRTH INT via CXR R-325 to CXR VOR/DME, then via CXR R-102 and ETG R-289 to MIGET INT, then via ETG R-289 to ETG VORTAC.

SLATE RUN TRANSITION (ERRTH2.SLT): (DME Required) From over ERRTH INT via YQG R-101 to TRACE INT, then via ECK R-139 to DORET INT, then via SLT R-287 to SLT VORTAC.

## TAKE-OFF OBSTACLES:

Rwy 7: Multiple trees beginning 232' from DER, 20' left of centerline, up to 60' AGL/687' MSL.  
Multiple trees beginning 283' from DER, 44' right of centerline, up to 56' AGL/680' MSL.

Stack 533' from DER, 66' right of centerline, 50' AGL/671' MSL.

OL on stack on Bldg 566' from DER, 18' right of centerline, 50' AGL/671' MSL.

OL on floodlight 622' from DER, 104' left of centerline, 41' AGL/668' MSL.

Light standard 149' from DER, 138' left of centerline, 37' AGL/654' MSL.

Light standard 227' from DER, 105' right of centerline, 33' AGL/654' MSL.

Antenna on bldg 936' from DER, 84' right of centerline, 43' AGL/670' MSL.

OL on floodlight 909' from DER, 96' right of centerline, 41' AGL/668' MSL.

Pole 466' from DER, 198' right of centerline, 30' AGL/654' MSL.

OL on pole 132' from DER, on centerline, 16' AGL/637' MSL.

Rwy 15: Multiple trees beginning 589' from DER, 221' left of centerline, up to 69' AGL/683' MSL.

Multiple trees beginning 299' from DER, 289' right of centerline, up to 52' AGL/679' MSL.

Ant on APBN 662' from DER, 667' left of centerline, 81' AGL/695' MSL.

Pipe on OL bldg 783' from DER, 597' left of centerline, 62' AGL/676' MSL.

OL on bldg 1,473' from DER, 556' right of centerline, 68' AGL/692' MSL.

Tower 3,376' from DER, 1,118' right of centerline, 103' AGL/723' MSL.

Antenna on bldg 803' from DER, 522' right of centerline, 35' AGL/656' MSL.

Building 3,749' from DER, 569' left of centerline, 114' AGL/723' MSL.

Floodlight on bldg 1,611' from DER, 657' left of centerline, 53' AGL/667' MSL.

Rod on OL building 450' from DER, 317' left of centerline, 20' AGL/637' MSL.

Rwy 25: Tower 2,828' from DER, 1,225' left of centerline, 141' AGL/770' MSL.

Multiple trees beginning 909' from DER, 133' left of centerline, up to 76' AGL/703' MSL.

Multiple trees beginning 334' from DER, 132' right of centerline, 58' AGL/685' MSL.

OL on building 48' from DER, 240' left of centerline, 41' AGL/662' MSL.

Railroad 1' from DER, 126' left of centerline, 29' AGL/650' MSL.

OL on stack 454' from DER, 45' left of centerline, 35' AGL/659' MSL.

Railroad 190' from DER, 40' left of centerline, 29' AGL/650' MSL.

OL stack on Bldg 949' from DER, 44' left of centerline, 41' AGL/668' MSL.

Stack 958' from DER, 12' left of centerline, 41' AGL/668' MSL.

Light standard 701' from DER, 145' right of centerline, 26' AGL/653' MSL.

Stack 9,474' from DER, 2,415' left of centerline, 241' AGL/872' MSL.

Rwy 33: Multiple trees beginning 113' from DER, 118' left of centerline, up to 73' AGL/694' MSL.

Multiple trees beginning 572' from DER, 84' right of centerline, up to 92' AGL/709' MSL.

Flag pole 963' from DER, 379' left of centerline, 28' AGL/658' MSL.

## ERRTH TWO DEPARTURE

DETROIT, MICHIGAN

## FORT WAYNE THREE DEPARTURE

DETROIT/ COLEMAN A. YOUNG MUNI (DET)  
SL-118 (FAA) DETROIT, MICHIGAN

ATIS 124.875  
GND CON  
121.85  
DETROIT CITY TOWER  
121.3 257.8  
DETROIT DEP CON  
126.85 239.275

DETROIT  
113.4 DXO   
Chan 81  
N42°12.79'-W83°22.00'  
L-28, H-10

1800  
328°

SPECIAL INSTRUCTIONS:

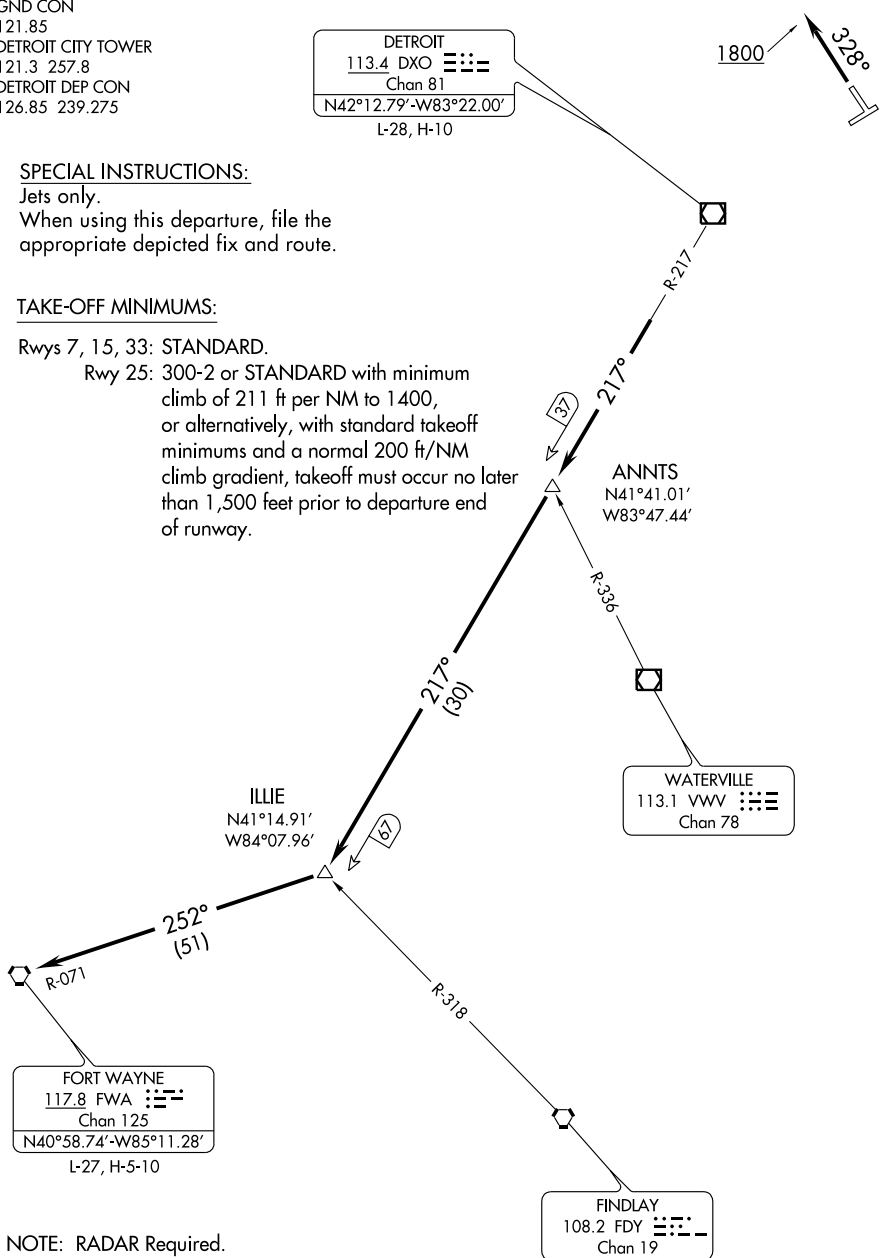
Jets only.

When using this departure, file the appropriate depicted fix and route.

TAKE-OFF MINIMUMS:

Rwys 7, 15, 33: STANDARD.

Rwy 25: 300-2 or STANDARD with minimum climb of 211 ft per NM to 1400, or alternatively, with standard takeoff minimums and a normal 200 ft/NM climb gradient, takeoff must occur no later than 1,500 feet prior to departure end of runway.



NOTE: RADAR Required.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

## FORT WAYNE THREE DEPARTURE

(FWA3.FWA) 08101

DETROIT, MICHIGAN  
DETROIT/ COLEMAN A. YOUNG MUNI (DET)





## DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 33: Climb via heading 328° to 1800 before turning, expect radar vectors, thence. . . .

TAKE-OFF ALL OTHER RUNWAYS: Climb via assigned heading for radar vectors, thence. . . .

. . . .to intercept DXO VOR/DME R-217 to ILLIE INT, then via FWA R-071 to FWA VORTAC. Maintain 3000, expect clearance to filed flight level ten (10) minutes after departure.

TAKE-OFF OBSTACLES:

- Rwy 7: Multiple trees beginning 232' from DER, 20' left of centerline, up to 60' AGL/687' MSL.  
Multiple trees beginning 283' from DER, 44' right of centerline, up to 56' AGL/680' MSL.  
Stack 533' from DER, 66' right of centerline, 50' AGL/671' MSL.  
OL on stack on bldg 566' from DER, 18' right of centerline, 50' AGL/671' MSL.  
OL on floodlight 622' from DER, 104' left of centerline, 41' AGL/668' MSL.  
Light standard 149' from DER, 138' left of centerline, 37' AGL/654' MSL.  
Light standard 227' from DER, 105' right of centerline, 33' AGL/654' MSL.  
Antenna on bldg 936' from DER, 84' right of centerline, 43' AGL/670' MSL.  
OL floodlight 909' from DER, 96' right of centerline, 41' AGL/668' MSL.  
Pole 466' from DER, 198' right of centerline, 30' AGL/654' MSL.  
OL on pole 132' from DER, on centerline, 16' AGL/637' MSL.
- Rwy 15: Multiple trees beginning 589' from DER, 221' left of centerline up to 69' AGL/683' MSL.  
Multiple trees beginning 299' from DER, 289' right of centerline, up to 52' AGL/679' MSL.  
Ant on APBN 662' from DER, 667' left of centerline, 81' AGL/695' MSL.  
Pipe on OL Bldg 783' from DER, 597' left of centerline, 62' AGL/676' MSL.  
OL on bldg 1,473' from DER, 556' right of centerline, 68' AGL/692' MSL.  
Tower 3,376' from DER, 1,118' right of centerline, 103' AGL/723' MSL.  
Antenna on Bldg 803' from DER, 522' right of centerline, 35' AGL/656' MSL.  
Building 3,749' from DER, 569' left of centerline, 114' AGL/723' MSL.  
Floodlight on Bldg 1,611' from DER, 657' left of centerline, 53' AGL/667' MSL.  
Rod on OL building 450' from DER, 317' left of centerline, 20' AGL/637' MSL.
- Rwy 25: Tower 2,828' from DER, 1,225' left of centerline, 141' AGL/770' MSL.  
Multiple trees beginning 909' from DER, 133' left of centerline, up to 76' AGL/703' MSL.  
Multiple trees beginning 334' from DER, 132' right of centerline, 58' AGL/685' MSL.  
OL on building 48' from DER, 240' left of centerline, 41' AGL/662' MSL.  
Railroad 1' from DER, 126' left of centerline, 29' AGL/650' MSL.  
OL on stack 454' from DER, 45' left of centerline, 35' AGL/659' MSL.  
Railroad 190' from DER, 40' left of centerline, 29' AGL/650' MSL.  
OL stack on Bldg 949' from DER, 44' left of centerline, 41' AGL/668' MSL.  
Stack 958' from DER, 12' left of centerline, 41' AGL/668' MSL.  
Light standard 701' from DER, 145' right of centerline, 26' AGL/653' MSL.  
Stack 9,474' from DER, 2,415' left of centerline, 241' AGL/872' MSL.
- Rwy 33: Multiple trees beginning 113' from DER, 118' left of centerline, up to 73' AGL/694' MSL.  
Multiple trees beginning 572' from DER, 84' right of centerline, up to 92' AGL/709' MSL.  
Flag pole 963' from DER, 379' left of centerline, 28' AGL/658' MSL.

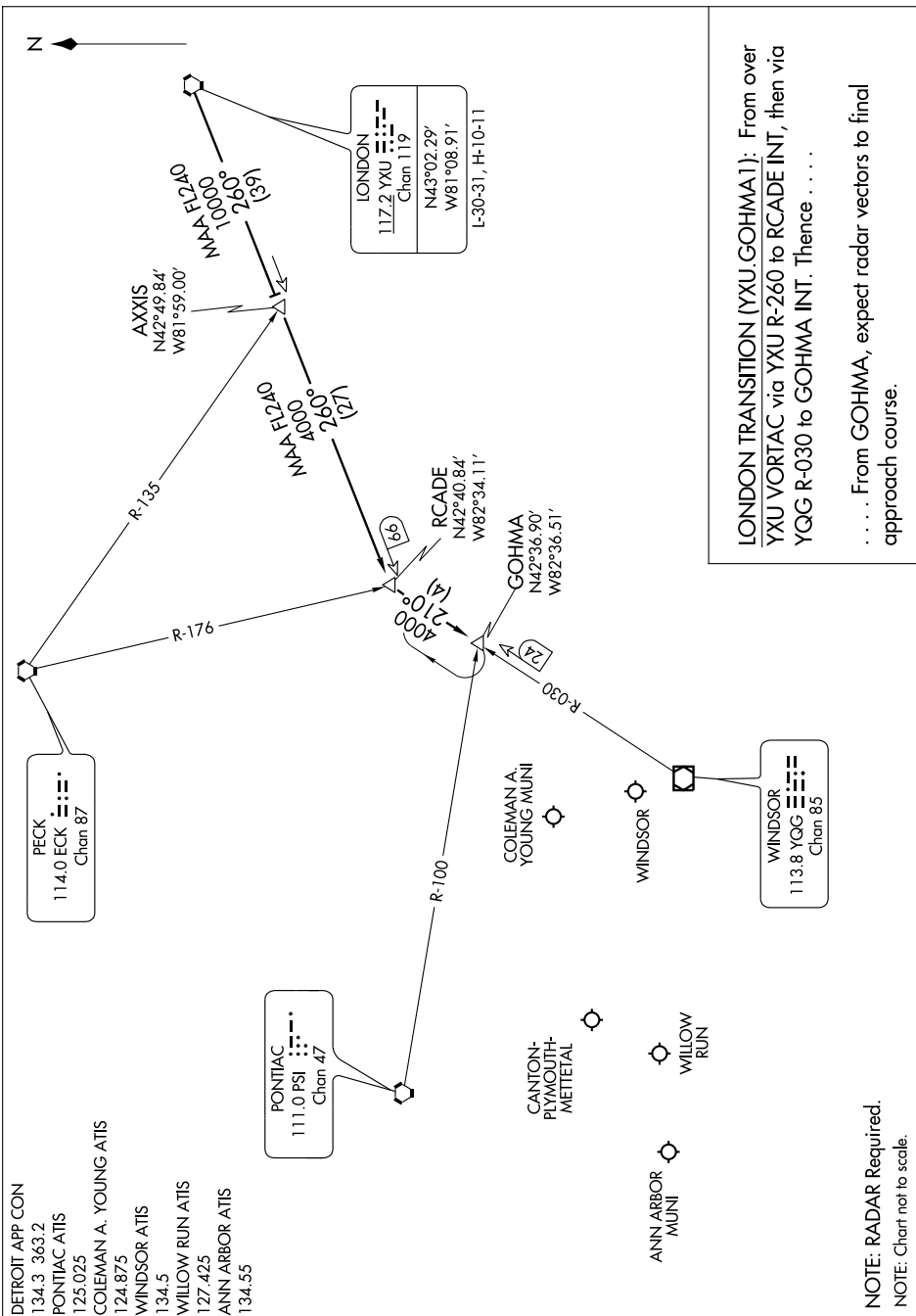
# GOHMA ONE ARRIVAL

DETROIT APP CON  
134.3 363.2  
PONTIAC ATIS  
125.025  
COLEMAN A. YOUNG ATIS  
124.875  
WINDSOR ATIS  
134.5  
WILLOW RUN ATIS  
127.425  
ANN ARBOR ATIS  
134.55

GOHMA ONE ARRIVAL  
(GOHMA.GOHMA1) 09351

ST-467 (FAA)

DETROIT, MICHIGAN



EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010

LOC I-VQM <b>111.3</b>	APP CRS <b>328°</b>	Rwy Idg TDZE Apt Elev	<b>5090</b> <b>624</b> <b>626</b>
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# ILS or LOC RWY 33

DETROIT/COLEMAN A. YOUNG MUNI (DET)

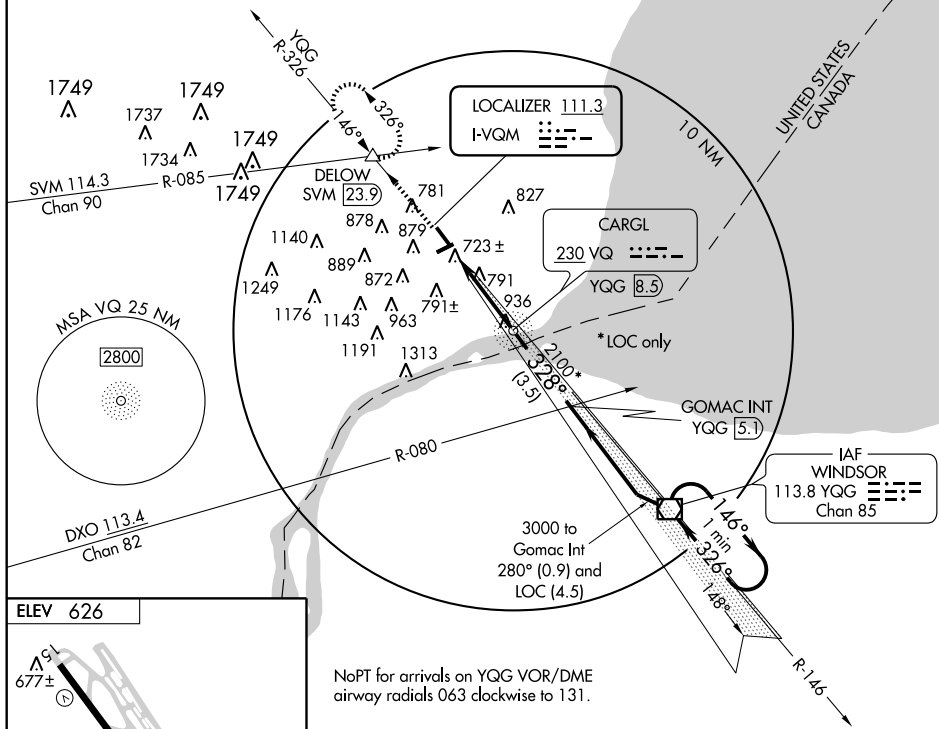


Inoperative table does not apply.

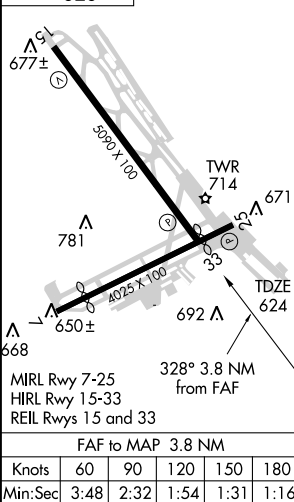
MISSED APPROACH: Climb to 3000 via YQG R-326 to DELOW Int and hold.

ATIS <b>124.875</b>	DETROIT APP CON <b>126.85 363.2</b>	DETROIT CITY TOWER <b>121.3 257.8</b>	GND CON <b>121.85</b>	UNICOM <b>122.95</b>
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## ADF, RADAR, or DME REQUIRED



ELEV 626



NoPT for arrivals on YQG VOR/DME airway radials 063 clockwise to 131.

	3000	DELOW	GOMAC INT YQG 5.1	VOR/DME	One Minute Holding Pattern
	YQG R-326 113.8	CARGL NDB YQG 8.5	3000	I-VQM 328°	YQG 280°
		1890	2100*	3000	146°
			*LOC only		326°
					3000
					GS 3.00° TCH 53
	3.8 NM	3.5 NM	4.5 NM	0.9	
CATEGORY	A	B	C	D	
S-ILS 33	874-1 250 (300-1)				
S-LOC 33	1120-1 496 (500-1)		1120-1 1/4 496 (500-1 1/4)	1120-1 1/2 496 (500-1 1/2)	
CIRCLING	1260-1 634 (700-1)		1260-1 3/4 634 (700-1 3/4)	1260-2 634 (700-2)	

LOC I-DET <b>111.3</b>	APP CRS <b>148°</b>	Rwy Idg TDZE Apt Elev	<b>5090</b> <b>624</b> <b>626</b>
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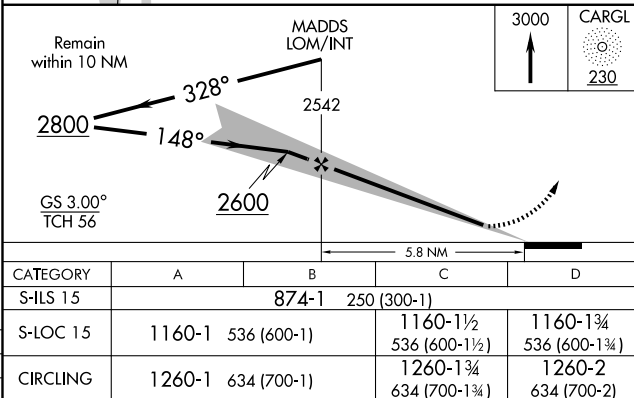
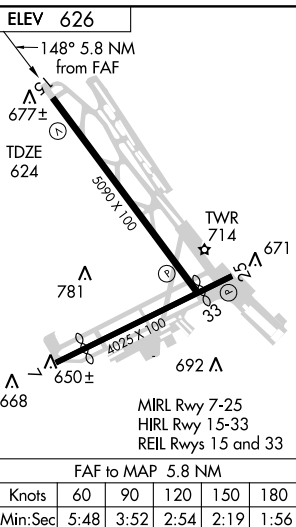
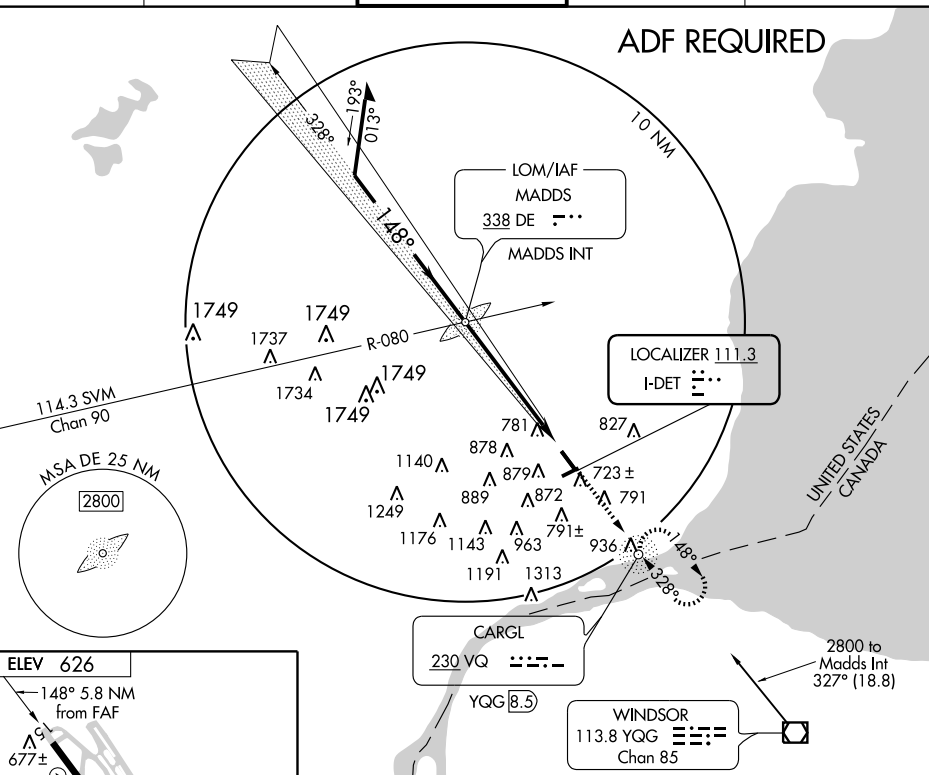
## ILS RWY 15

DETROIT/COLEMAN A. YOUNG MUNI (DET)

▼ Inoperative table does not apply.  
Air carrier landing visibility reduction for local conditions not authorized.

MISSED APPROACH: Climb to 3000 direct Cargl NDB/YQG 8.5 DME and hold.

ATIS <b>124.875</b>	DETROIT APP CON <b>126.85 363.2</b>	DETROIT CITY TOWER <b>121.3 257.8</b>	GND CON <b>121.85</b>	UNICOM <b>122.95</b>
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## LAND AND HOLD SHORT OPERATIONS (LAHSO)

LAHSO is an acronym for "Land and Hold Short Operations." These operations include landing and holding short of an intersection runway, an intersecting taxiway, or other predetermined points on the runway other than a runway or taxiway. Measured distance represents the available landing distance on the landing runway, in feet.

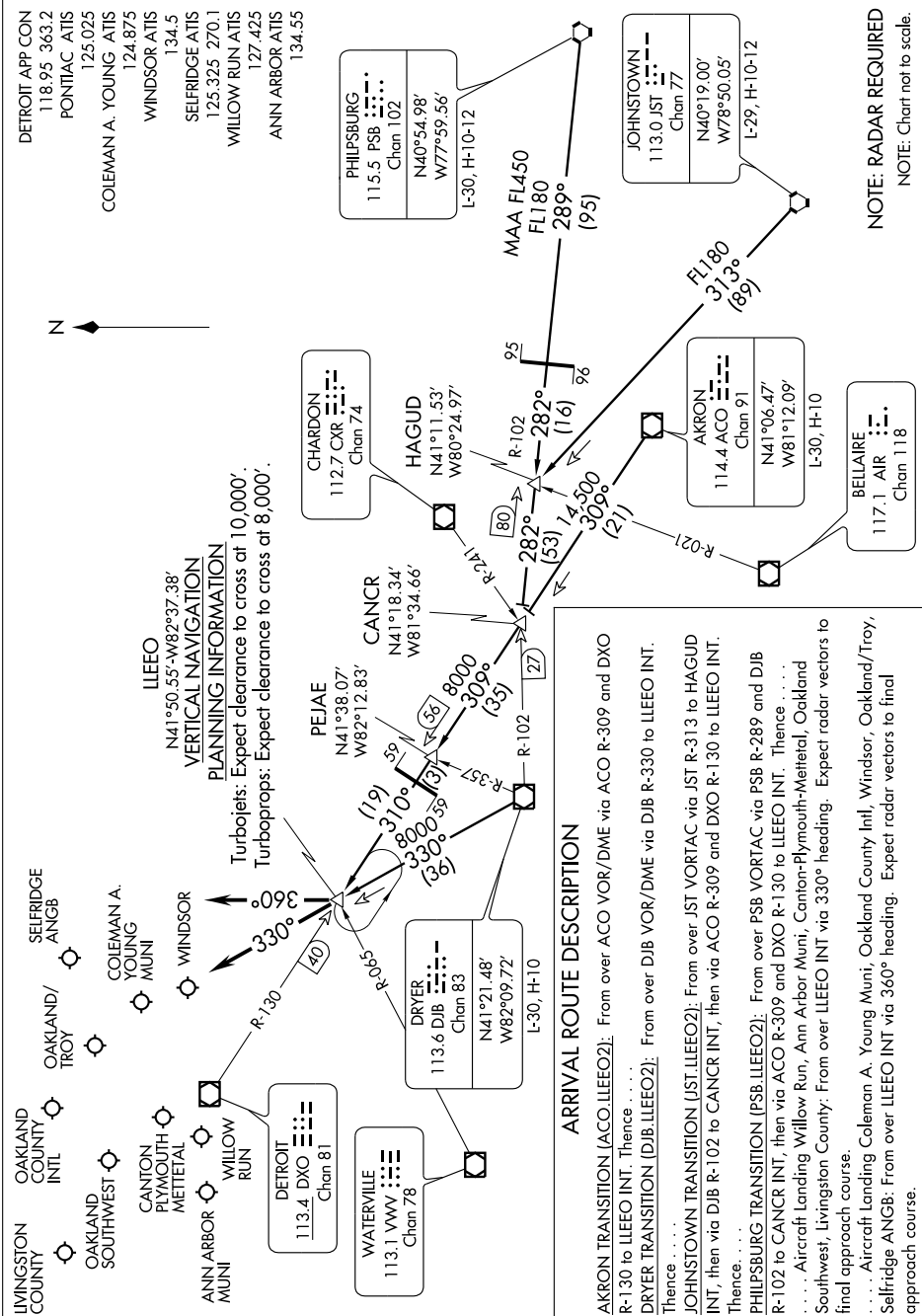
Specific questions regarding these distances should be referred to the air traffic manager of the facility concerned. The Aeronautical Information Manual contains specific details on hold-short operations and markings.

CITY/AIRPORT	LDG RWY	HOLD-SHORT POINT	MEASURED DISTANCE
BATTLE CREEK, MI W.K. KELLOGG (BTL)	05	13-31	7,000 feet
DETROIT, MI COLEMAN A. YOUNG MUNI (DET)	15	07-25	4,900 feet
FLINT, MI BISHOP INTL (FNT)	09 36	18-36 09-27	4,100 feet 6,300 feet
JACKSON, MI JACKSON COUNTY-REYNOLDS FIELD (JXN)	24	14-32	3,406 feet
TRAVERSE CITY, MI CHERRY CAPITAL (TVC)	18 28 28	10-28 18-36 18-36	2,850 feet 5,500 feet 5,500 feet

23 SEP 2010 to 21 OCT 2010

23 SEP 2010 to 21 OCT 2010

## LLEEO TWO ARRIVAL



## LLEEO TWO ARRIVAL

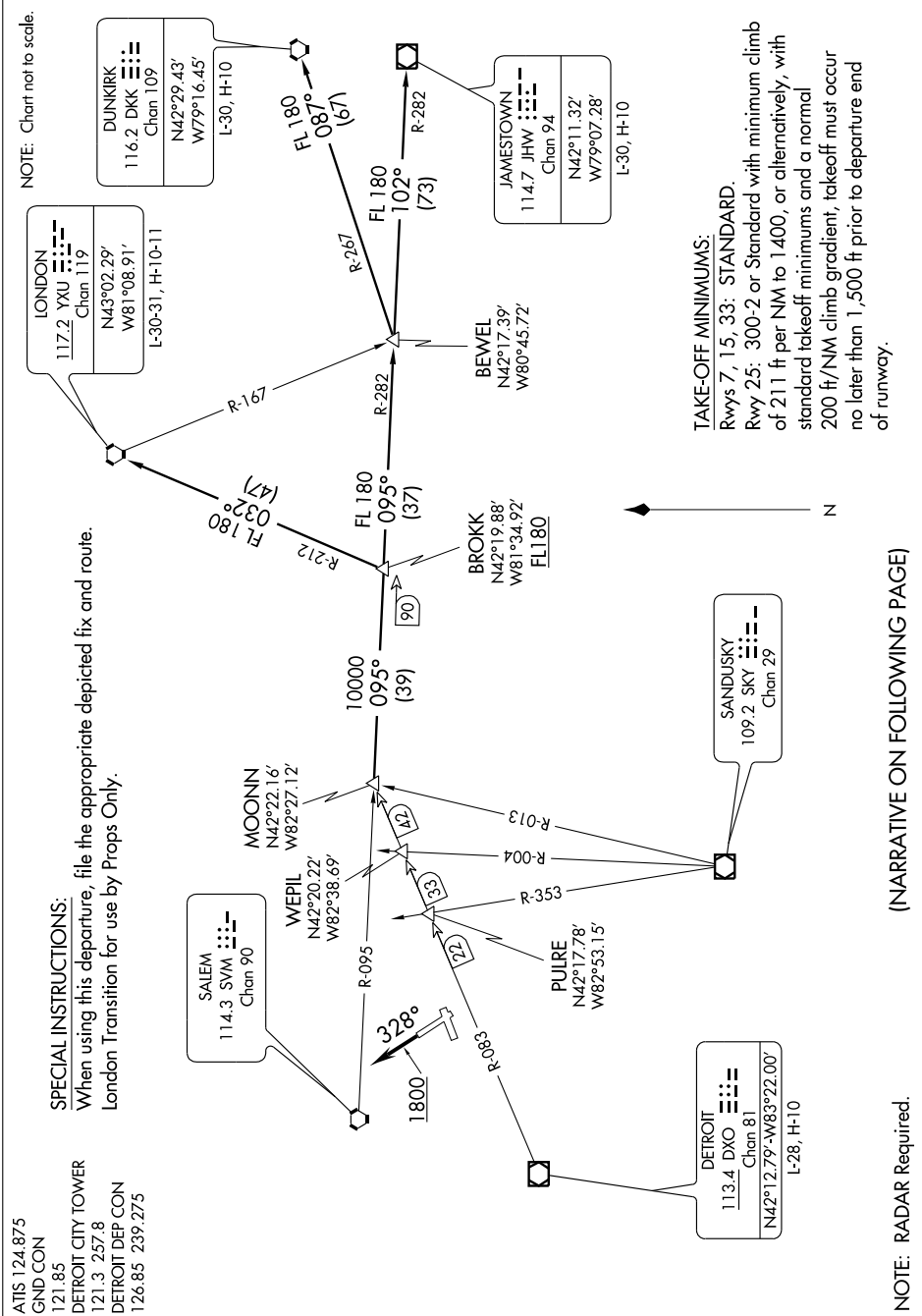
MOONN TWO DEPARTURE

SL-118 (FAA)

DETROIT /COLEMAN A. YOUNG MUNI (DET)

DETROIT, MICHIGAN

EC-1, 23 SEP 2010 to 21 OCT 2010



MOONN TWO DEPARTURE

DETROIT /COLEMAN A. YOUNG MUNI (DET)

DETROIT, MICHIGAN

## MOONN TWO DEPARTURE

SL-118 (FAA)

DETROIT, MICHIGAN



## DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 33: Climb heading 328° to 1800' before turning expect radar vectors to join the assigned SID. Maintain 3000 feet, expect clearance to filed altitude/flight level ten (10) minutes after departure.

TAKE-OFF ALL OTHER RUNWAYS: Climb via assigned heading for radar vectors to join the assigned SID. Maintain 3000 feet, expect clearance to filed altitude/flight level ten (10) minutes after departure.

DUNKIRK TRANSITION (MOONN2.DKK): From over MOONN INT via SVM R-095 to BROKK INT, then via SVM R-095 and JHW R-282 to BEWEL INT, then via DKK R-267 to DKK VORTAC.

JAMESTOWN TRANSITION (MOONN2.JHW): From over MOONN INT via SVM R-095 to BROKK INT, then via SVM R-095 and JHW R-282 to BEWEL INT, then via JHW R-282 to JHW VOR/DME.

LONDON TRANSITION (MOONN2.YXU): From over MOONN INT via SVM R-095 to BROKK INT, then via YXU R-212 to YXU VORTAC.

## TAKE-OFF OBSTACLES

- Rwy 7: Multiple trees beginning 232' from DER, 20' left of centerline, up to 60' AGL/687' MSL.  
Multiple trees beginning 283' from DER, 44' right of centerline, up to 56' AGL/680' MSL.  
Stack 533' from DER, 66' right of centerline, 50' AGL/671' MSL.  
OL on stack on Bldg 566' from DER, 18' right of centerline, 50' AGL/671' MSL.  
OL on floodlight 622' from DER, 104' left of centerline, 41' AGL/668' MSL.  
Light standard 149' from DER, 138' left of centerline, 37' AGL/654' MSL.  
Light standard 227' from DER, 105 right of centerline, 33' AGL/654' MSL.  
Antenna on Bldg 936' from DER, 84' right of centerline, 43' AGL/670' MSL.  
OL floodlight 909' from DER, 96' right of centerline, 41' AGL/668' MSL.  
Pole 466' from DER, 198' right of centerline, 30' AGL/654' MSL.  
OL on pole 132' from DER, on centerline, 16' AGL/637' MSL.
- Rwy 15: Multiple trees beginning 589' from DER, 221' left of centerline up to 69' AGL/683' MSL.  
Multiple trees beginning 299' from DER, 289' right of centerline, up to 52' AGL/679' MSL.  
Ant on APBN 662' from DER, 667' left of centerline, 81' AGL/695' MSL.  
Pipe on OL Bldg 783' from DER, 597' left of centerline, 62' AGL/676' MSL.  
OL on Bldg 1,473' from DER, 556' right of centerline, 68' AGL/692' MSL.  
Tower 3,376' from DER, 1,118' right of centerline, 103' AGL/723' MSL.  
Antenna on Bldg 803' from DER, 522' right of centerline, 35' AGL/656' MSL.  
Building 3,749' from DER, 569' left of centerline, 114' AGL/723' MSL.  
Floodlight on Bldg 1,611' from DER 657' left of centerline, 53' AGL/667' MSL.  
Rod on OL building 450' from DER, 317' left of centerline, 20' AGL/637' MSL.
- Rwy 25: Tower 2,828' from DER, 1,225' left of centerline, 141' AGL/770' MSL.  
Multiple trees beginning 909' from DER, 133' left of centerline, up to 76' AGL/703' MSL.  
Multiple trees beginning 334' from DER, 132' right of centerline, 58' AGL/685' MSL.  
OL on building 48' from DER, 240' left of centerline, 41' AGL/662' MSL.  
Railroad 1' from DER, 126' left of centerline, 29' AGL/650' MSL.  
OL on stack 454' from DER, 45' left of centerline, 35' AGL/659' MSL.  
Railroad 190' from DER, 40' left of centerline, 29' AGL/650' MSL.  
OL stack on Bldg 949' from DER, 44' left of centerline, 41' AGL/668' MSL.  
Stack 958' from DER, 12' left of centerline, 41' AGL/668' MSL.  
Light standard 701' from DER, 145' right of centerline, 26' AGL/653' MSL.  
Stack 9,474 from DER, 2,415' left of centerline, 241' AGL/872' MSL.
- Rwy 33: Multiple trees beginning 113' from DER, 118' left of centerline, up to 73' AGL/694' MSL.  
Multiple trees beginning 572' from DER, 84' right of centerline, up to 92' AGL/709' MSL.  
Flag pole 963' from DER, 379' left of centerline, 28' AGL/658' MSL.

## MOONN TWO DEPARTURE

DETROIT, MICHIGAN



LOM DE <b><u>338</u></b>	APP CRS <b>148°</b>	Rwy Idg TDZE Apt Elev	<b>5090</b> <b>624</b> <b>626</b>
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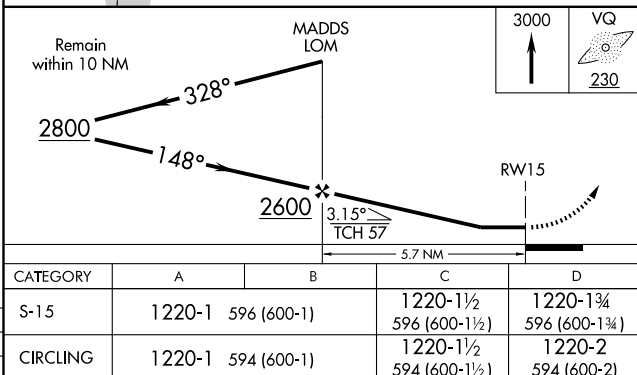
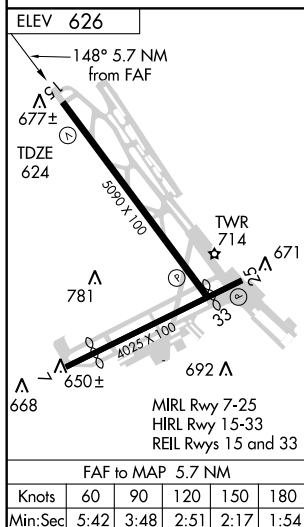
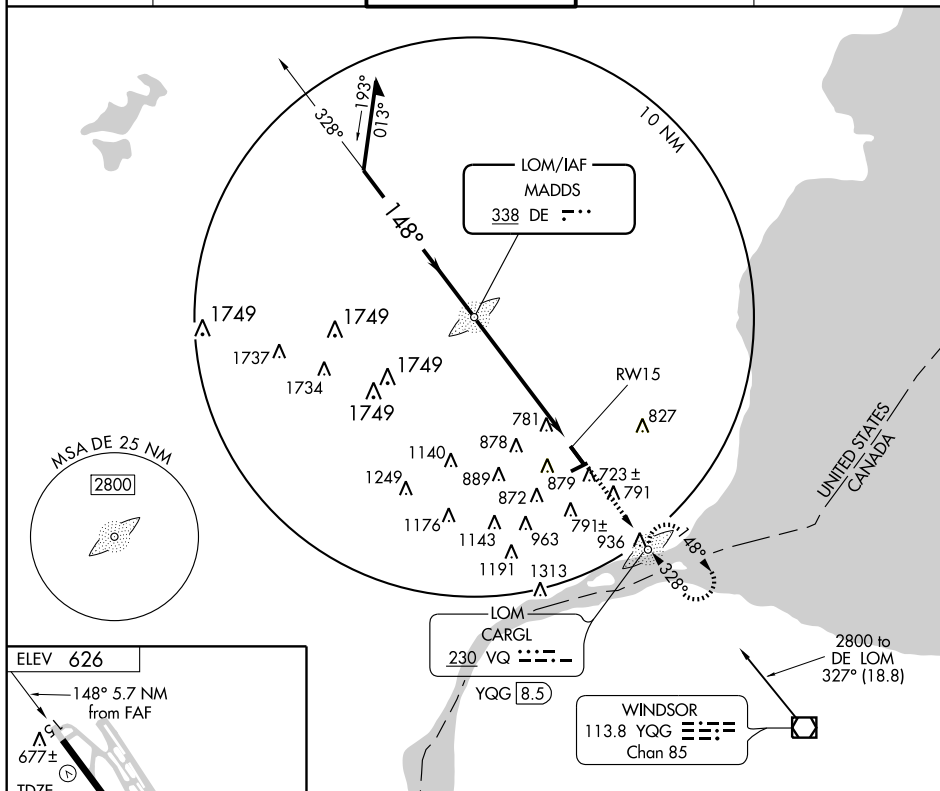
## NDB RWY 15

DETROIT/ COLEMAN A. YOUNG MUNI (DET)

- T** Visibility reduction by helicopters NA.  
**A** When local altimeter setting not received, use Detroit Metro Wayne County altimeter setting and increase all MDA 60 feet and increase S-15 Cat C and D visibility  $\frac{1}{4}$  mile, and Circling Cat C  $\frac{1}{4}$  mile.

**MISSED APPROACH:** Climb to 3000 direct VQ LOM/YQG 8.5 DME and hold, continue climb in hold to 3000.

ATIS <b>124.875</b>	DETROIT APP CON <b>126.85 363.2</b>	DETROIT CITY TOWER <b>121.3 257.8</b>	GND CON <b>121.85</b>	UNICOM <b>122.95</b>
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DETROIT, MICHIGAN

Amdt 23 09295

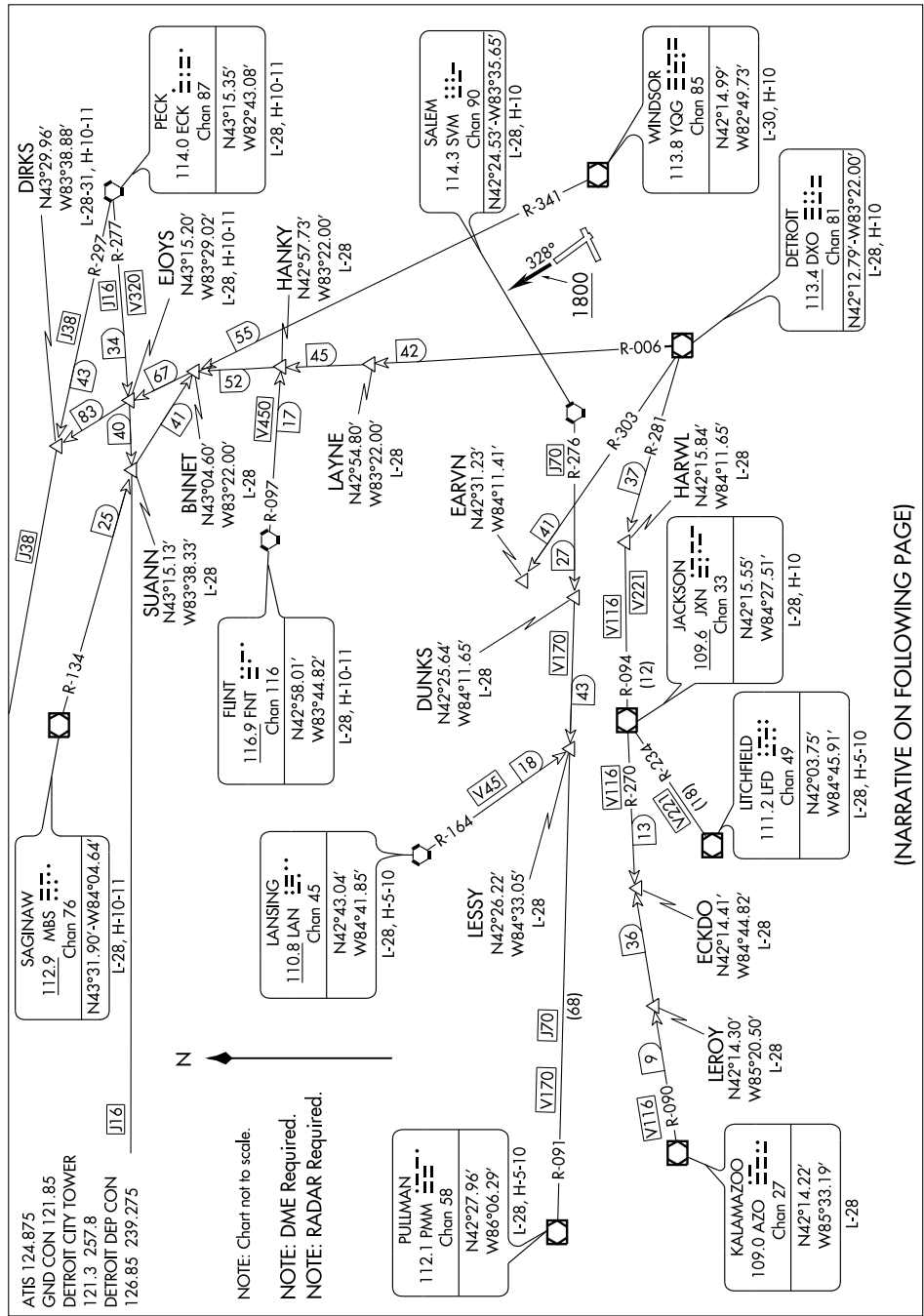
DETROIT/ COLEMAN A. YOUNG MUNI (DET)

42°25'N - 83°01'W

NDB RWY 15

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1. 23 SEP 2010 to 21 OCT 2010



(NARRATIVE ON FOLLOWING PAGE)



## DEPARTURE ROUTE DESCRIPTION

TAKE-OFF MINIMUMS:

Rwy 7, 15, 33: STANDARD.

Rwy 25: 300-2 or STANDARD with minimum climb of 211 ft per NM to 1400, or alternatively, with standard takeoff minimums and a normal 200 ft/NM climb gradient, takeoff must occur no later than 1,500 ft prior to departure end of runway.

SPECIAL INSTRUCTIONS:

When using this departure, file the appropriate depicted departure fix and route. Aircraft landing/overflying Lansing (LAN) or overflying Flint (FNT) at 10,000 feet or below, file via EARVN. Aircraft landing Flint (FNT) at 10,000 feet or below, file via LAYNE. Aircraft over HARWL must file FL220 and below.

TAKE-OFF RWY 33: Climb heading 328° to 1800 before turning, expect radar vectors to join assigned SID. Maintain 3000 feet, expect clearance to filed altitude/flight level ten (10) minutes after departure.

TAKE-OFF ALL OTHER RUNWAYS: Climb via assigned heading for radar vectors to join the assigned SID. Maintain 3000 feet, expect clearance to filed altitude/flight level ten (10) minutes after departure.

TAKE-OFF OBSTACLES:

- Rwy 7: Multiple trees beginning 232' from DER, 20' left of centerline, up to 60' AGL/687' MSL.  
Multiple trees beginning 283' from DER, 44' right of centerline, up to 56' AGL/680' MSL.  
Stack 533' from DER, 66' right of centerline, 50' AGL/671' MSL.  
OL on stack on Bldg 566' from DER, 18' right of centerline, 50' AGL/671' MSL.  
OL on floodlight 622' from DER, 104' left of centerline, 41' AGL/668' MSL.  
Light standard 149' from DER, 138' left of centerline, 37' AGL/654' MSL.  
Light standard 227' from DER, 105' right of centerline, 33' AGL/654' MSL.  
Antenna on Bldg 936' from DER, 84' right of centerline, 43' AGL/670' MSL.  
OL floodlight 909' from DER, 96' right of centerline, 41' AGL/668' MSL.  
Pole 466' from DER, 198' right of centerline, 30' AGL/654' MSL.  
OL on pole 132' from DER, on centerline, 16' AGL/637' MSL.
- Rwy 15: Multiple trees beginning 589' from DER, 221' left of centerline up to 69' AGL/683' MSL.  
Multiple trees beginning 299' from DER, 289' right of centerline, up to 52' AGL/679' MSL.  
Ant on APBN 662' from DER, 667' left of centerline, 81' AGL/695' MSL.  
Pipe on OL Bldg 783' from DER, 597' left of centerline, 62' AGL/676' MSL.  
OL on Bldg 1,473' from DER, 556' right of centerline, 68' AGL/692' MSL.  
Tower 3,376' from DER, 1,118' right of centerline, 103' AGL/723' MSL.  
Antenna on Bldg 803' from DER, 522' right of centerline, 35' AGL/656' MSL.  
Building 3,749' from DER, 569' left of centerline, 114' AGL/723' MSL.  
Floodlight on Bldg 1,611' from DER, 657' left of centerline, 53' AGL/667' MSL.  
Rod on OL building 450' from DER, 317' left of centerline, 20' AGL/637' MSL.
- Rwy 25: Tower 2,828' from DER, 1,225' left of centerline, 141' AGL/770' MSL.  
Multiple trees beginning 909' from DER, 133' left of centerline, up to 76' AGL/703' MSL.  
Multiple trees beginning 334' from DER, 132' right of centerline, 58' AGL/685' MSL.  
OL on building 48' from DER, 240' left of centerline, 41' AGL/662' MSL.  
Railroad 1' from DER, 126' left of centerline, 29' AGL/650' MSL.  
OL on stack 454' from DER, 45' left of centerline, 35' AGL/659' MSL.  
Railroad 190' from DER, 40' left of centerline, 29' AGL/650' MSL.  
OL stack on Bldg 949' from DER, 44' left of centerline, 41' AGL/668' MSL.  
Stack 958' from DER, 12' left of centerline, 41' AGL/668' MSL.  
Light standard 701' from DER, 145' right of centerline, 26' AGL/653' MSL.  
Stack 9,474' from DER, 2,415' left of centerline, 241' AGL/872' MSL.
- Rwy 33: Multiple trees beginning 113' from DER, 118' left of centerline, up to 73' AGL/694' MSL.  
Multiple trees beginning 572' from DER, 84' right of centerline, up to 92' AGL/709' MSL.  
Flag pole 963' from DER, 379' left of centerline, 28' AGL/658' MSL.

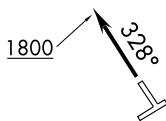
(RID4.RID) 09015

# RICHMOND FOUR DEPARTURE

DETROIT/ COLEMAN A. YOUNG MUNI (DET)  
SL-118 (FAA)

DETROIT, MICHIGAN

ATIS 124.875  
GND CON  
121.85  
DETROIT CITY TOWER  
121.3 257.8  
DETROIT DEP CON  
126.85 239.275



DETROIT  
113.4 DXO   
Chan 81  
N42°12.79'-W83°22.00'  
L-28, H-10

CAVVS  
N41°41.04'  
W83°34.14'  
L-28

SANDUSKY  
109.2 SKY   
Chan 29

WATERVILLE  
113.1 VVV   
Chan 78  
N41°27.09'  
W83°38.32'  
L-28, H-10

## SPECIAL INSTRUCTIONS:

Jets only.

When using this departure, file the appropriate depicted fix and route.

## TAKE-OFF MINIMUMS:

Rwys 7, 15, 33: STANDARD.

Rwy 25: 300-2 or Standard with minimum climb of 211 ft per NM to 1400, or alternatively, with standard takeoff minimums and a normal 200 ft/NM climb gradient, takeoff must occur no later than 1,500 ft prior to departure end of runway.

NOTE: RADAR Required.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

# RICHMOND FOUR DEPARTURE

(RID4.RID) 09015

DETROIT, MICHIGAN  
DETROIT/ COLEMAN A. YOUNG MUNI (DET)

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 33: Climb via heading 328° to 1800 before turning, expect radar vectors, thence ....

TAKE OFF ALL OTHER RWYS: Climb via assigned heading for radar vectors thence ....

....To intercept DXO VOR/DME R-202 to CAVVS INT/DXO 33 DME, then via VWV R-015 to VWV VOR/DME. Then right turn via VWV R-211 and RID R-031 to RID VORTAC. Maintain 3,000 feet, expect clearance to filed altitude/flight level ten (10) minutes after departure.

TAKE-OFF OBSTACLES:

- Rwy 7: Multiple trees beginning 232' from DER, 20' left of centerline, up to 60' AGL/687' MSL.  
Multiple trees beginning 283' from DER, 44' right of centerline, up to 56' AGL/680' MSL.  
Stack 533' from DER, 66' right of centerline, 50' AGL/671' MSL.  
OL on stack on Bldg 566' from DER, 18' right of centerline, 50' AGL/671' MSL.  
OL on floodlight 622' from DER, 104' left of centerline, 41' AGL/668' MSL.  
Light standard 149' from DER, 138' left of centerline, 37' AGL/654' MSL.  
Light standard 227' from DER, 105' right of centerline, 33' AGL/654' MSL.  
Antenna on Bldg 936' from DER, 84' right of centerline, 43' AGL/670' MSL.  
OL floodlight 909' from DER, 96' right of centerline, 41' AGL/668' MSL.  
Pole 466' from DER, 198' right of centerline, 30' AGL/654' MSL.  
OL on pole 132' from DER, on centerline, 16' AGL/637' MSL.
- Rwy 15: Multiple trees beginning 589' from DER, 221' left of centerline up to 69' AGL/683' MSL.  
Multiple trees beginning 299' from DER, 289' right of centerline, up to 52' AGL/679' MSL.  
Ant on APBN 662' from DER, 667' left of centerline, 81' AGL/695' MSL.  
Pipe on OL Bldg 783' from DER, 597' left of centerline, 62' AGL/676' MSL.  
OL on Bldg 1473' from DER, 556' right of centerline, 68' AGL/692' MSL.  
Tower 3376' from DER, 1118' right of centerline, 103' AGL/723' MSL.  
Antenna on Bldg 803' from DER, 522' right of centerline, 35' AGL/656' MSL.  
Building 3749' from DER, 569' left of centerline, 114' AGL/723' MSL.  
Floodlight on Bldg 1611' from DER, 657' left of centerline, 53' AGL/667' MSL.  
Rod on OL building 450' from DER, 317' left of centerline, 20' AGL/637' MSL.
- Rwy 25: Tower 2828' from DER, 1225' left of centerline, 141' AGL/770' MSL.  
Multiple trees beginning 909' from DER, 133' left of centerline, up to 76' AGL/703' MSL.  
Multiple trees beginning 334' from DER, 132' right of centerline, 58' AGL/685' MSL.  
OL on building 48' from DER, 240' left of centerline, 41' AGL/662' MSL.  
Railroad 1' from DER, 126' left of centerline, 29' AGL/650' MSL.  
OL on stack 454' from DER, 45' left of centerline, 35' AGL/659' MSL.  
Railroad 190' from DER, 40' left of centerline, 29' AGL/650' MSL.  
OL stack on Bldg 949' from DER, 44' left of centerline, 41' AGL/668' MSL.  
Stack 958' from DER, 12' left of centerline, 41' AGL/668' MSL.  
Light standard 701' from DER, 145' right of centerline, 26' AGL/653' MSL.  
Stack 9474 from DER, 2415' left of centerline, 241' AGL/872' MSL.
- Rwy 33: Multiple trees beginning 113' from DER, 118' left of centerline, up to 73' AGL/694' MSL.  
Multiple trees beginning 572' from DER, 84' right of centerline, up to 92' AGL/709' MSL.  
Flag pole 963' from DER, 379' left of centerline, 28' AGL/658' MSL.

WAAS CH <b>63211</b> <b>W15A</b>	APP CRS <b>148°</b>	Rwy Idg TDZE Apt Elev	<b>5090</b> <b>624</b> <b>626</b>
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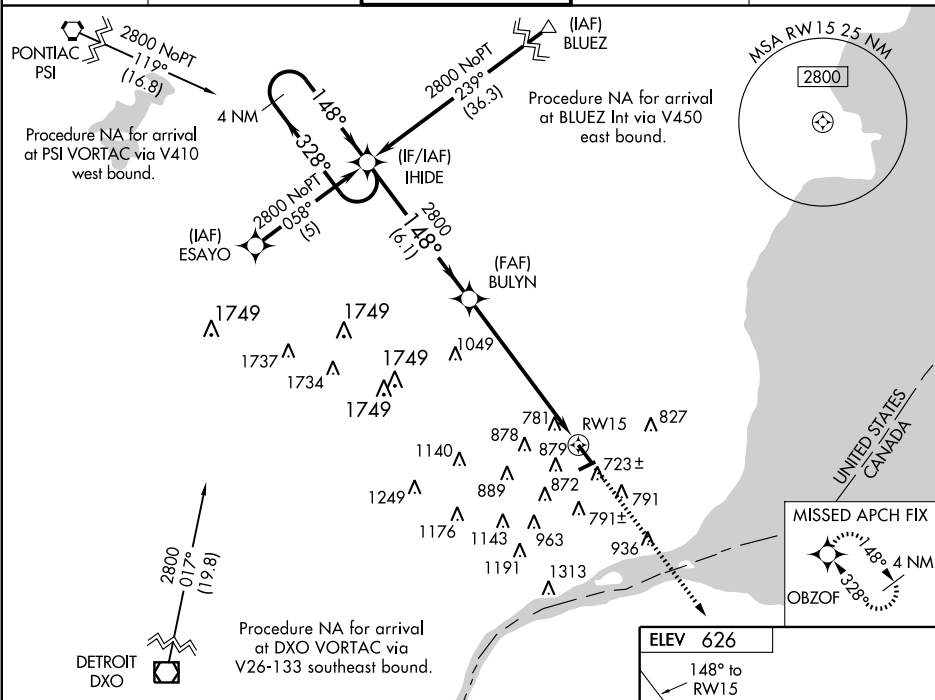
## RNAV (GPS) RWY 15

DETROIT/ COLEMAN A. YOUNG MUNI (DET)

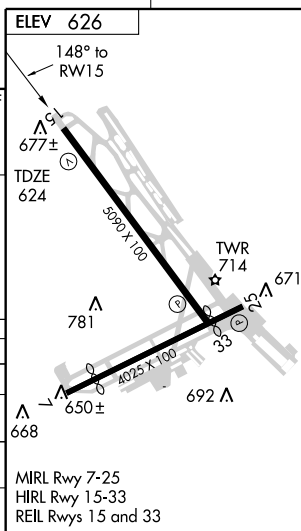
▼ For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 48°C (118°F). Visibility reduction by helicopters NA. When local altimeter setting not received, use Detroit Metropolitan Wayne County altimeter setting and increase all DA 48 feet and all MDA 60 feet, increase visibility LPV all Cats, LNAV/VNAV all Cats, and Circling Cat C ¼ mile. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 3000 direct OBZOF and hold.

ATIS <b>124.875</b>	DETROIT APP CON <b>126.85 363.2</b>	DETROIT CITY TOWER <b>121.3 257.8</b>	GND CON <b>121.85</b>	UNICOM <b>122.95</b>
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4 NM Holding Pattern				
IHIDE				
BULYN				
2800 ← 328° 148° → 2800				
GS 3.00° TCH 60				
6.1 NM      6.5 NM				
CATEGORY	A	B	C	D
LPV DA	927-1		303 (400-1)	
LNAV/VNAV DA	1079-1½		455 (500-1½)	
LNAV MDA	1180-1	556 (600-1)	1180-1½ 556 (600-1½)	1180-1¾ 556 (600-1¾)
CIRCLING	1180-1	554 (600-1)	1180-1½ 554 (600-1½)	1200-2 574 (600-2)



WAAS CH <b>58211</b> <b>W33A</b>	APP CRS <b>328°</b>	Rwy Idg TDZE Apt Elev	<b>5090</b> <b>626</b> <b>626</b>
--	------------------------	-----------------------------	---

# RNAV (GPS) RWY 33

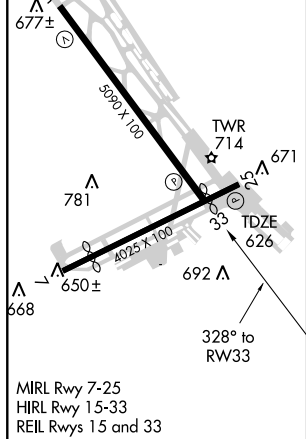
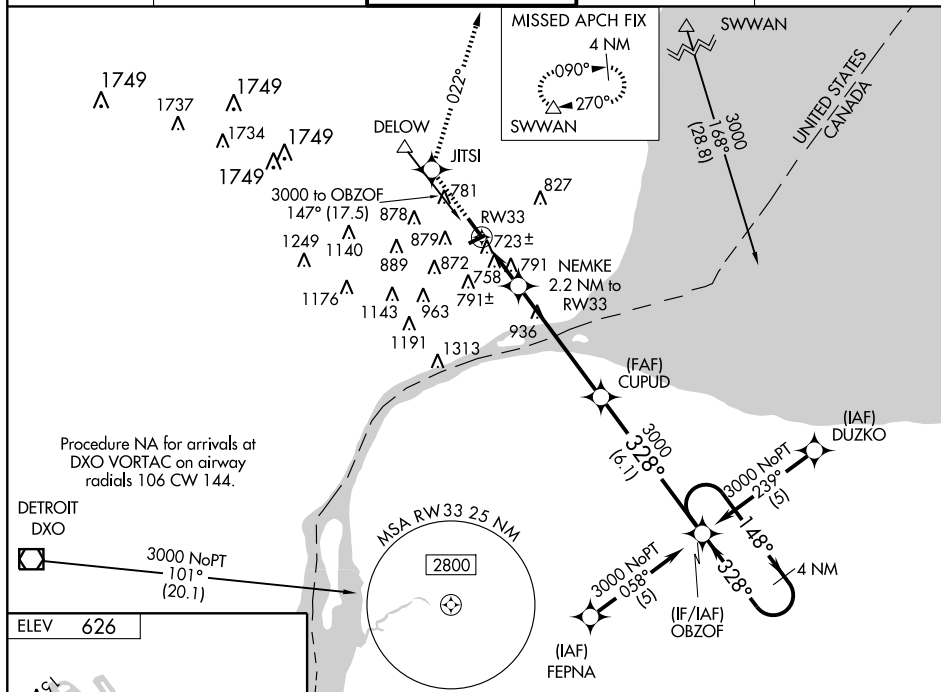
DETROIT/ COLEMAN A. YOUNG MUNI (DET)



For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 48°C (118°F). Visibility reduction by helicopters NA. When local altimeter setting not received, use Detroit Metropolitan Wayne County altimeter setting and increase all DA 48 feet and all MDA 60 feet; increase visibility LPV all Cats, LNAV Cat C and D and Circling Cat C ¼ mile. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 4000 direct JITS1 and via 022° track to SWWAN and hold.

ATIS <b>124.875</b>	DETROIT APP CON <b>126.85 363.2</b>	DETROIT CITY TOWER <b>121.3 257.8</b>	GND CON <b>121.85</b>	UNICOM <b>122.95</b>
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4000	JITS1	TRK 022°	SWWAN	CUPUD	OBZOF	4 NM Holding Pattern
*LNAV only	NEMKE 2.2 NM to RW33	*1380	3000	328°	148°	3000
RW33	2.2 NM	5 NM	6.1 NM	GS 3.00° TCH 51		
CATEGORY	A	B	C	D		
LPV DA	936-1	310 (400-1)				
LNAV/VNAV DA	1039-1½	413 (500-1½)				
LNAV MDA	1100-1 474 (500-1)	1100-1¼ 474 (500-1¼)	1100-1½ 474 (500-1½)			
CIRCLING	1180-1 554 (600-1)	1180-1½ 554 (600-1½)	1200-2 574 (600-2)			

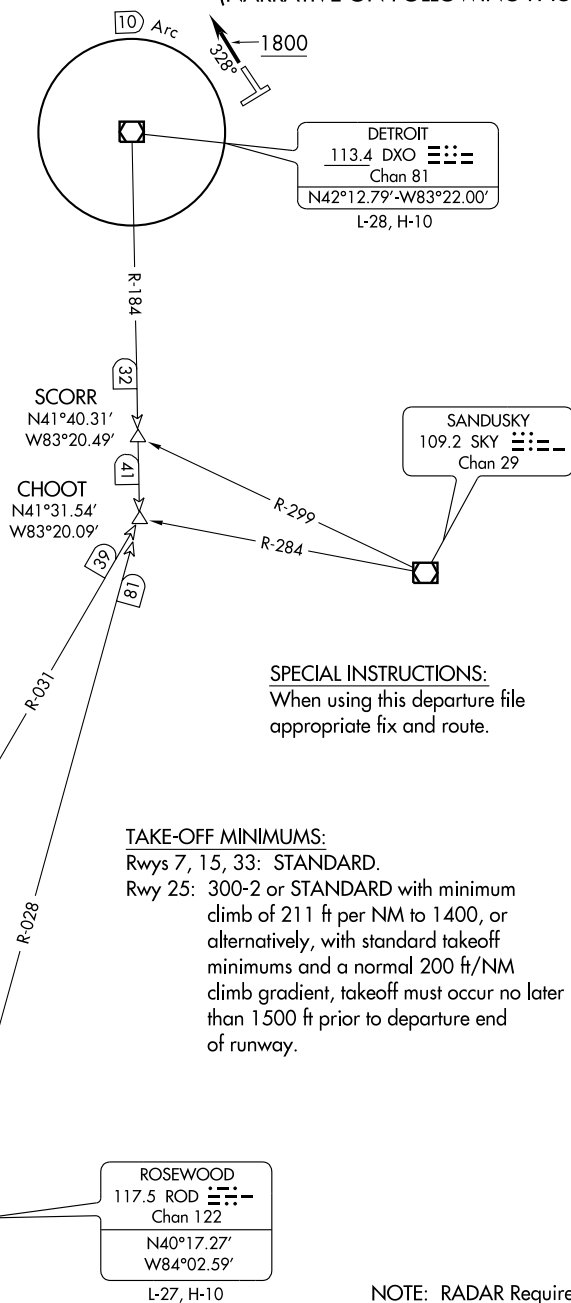
## ROSEWOOD TWO DEPARTURE

SL-118 (FAA)

DETROIT, MICHIGAN

ATIS 124.875  
GND CON  
121.85  
DETROIT CITY TOWER  
121.3 257.8  
DETROIT DEP CON  
126.85 239.275

(NARRATIVE ON FOLLOWING PAGE)



EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010

## ROSEWOOD TWO DEPARTURE

(ROD2.ROD) 07354

DETROIT, MICHIGAN

DETROIT/COLEMAN A. YOUNG MUNI (DET)



## ROSEWOOD TWO DEPARTURE

SL-118 (FAA)

DETROIT, MICHIGAN



## DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 33: Climb heading 328 to 1800 before turning expect vectors to join the assigned SID. Maintain 3000 feet, expect clearance to filed altitude/flight level ten (10) minutes after departure.

TAKE-OFF ALL OTHER RUNWAYS: Climb via assigned heading for radar vectors to join the assigned SID. Maintain 3000 feet, expect clearance to filed altitude/flight level ten (10) minutes after departure.

TAKE-OFF OBSTACLES:

- Rwy 7: Multiple trees beginning 232' from DER, 20' left of centerline, up to 60' AGL/687' MSL.  
Multiple trees beginning 283' from DER, 44' right of centerline, up to 56' AGL/680' MSL.  
Stack 533' from DER, 66' right of centerline, 50' AGL/671' MSL.  
OL on stack on Bldg 566' from DER, 18' right of centerline, 50' AGL/671' MSL.  
OL on floodlight 622' from DER, 104' left of centerline, 41' AGL/668' MSL.  
Light standard 149' from DER, 138' left of centerline, 37' AGL/654' MSL.  
Light standard 227' from DER, 105' right of centerline, 33' AGL/654' MSL.  
Antenna on Bldg 936' from DER, 84' right of centerline, 43' AGL/670' MSL.  
OL floodlight 909' from DER, 96' right of centerline, 41' AGL/668' MSL.  
Pole 466' from DER, 198' right of centerline, 30' AGL/654' MSL.  
OL on pole 132' from DER, on centerline, 16' AGL/637' MSL.
- Rwy 15: Multiple trees beginning 589' from DER, 221' left of centerline up to 69' AGL/683' MSL.  
Multiple trees beginning 299' from DER, 289' right of centerline, up to 52' AGL/679' MSL.  
Ant on APBN 662' from DER, 667' left of centerline, 81' AGL/695' MSL.  
Pipe on OL Bldg 783' from DER, 597' left of centerline, 62' AGL/676' MSL.  
OL on Bldg 1,473' from DER, 556' right of centerline, 68' AGL/692' MSL.  
Tower 3,376' from DER, 1,118' right of centerline, 103' AGL/723' MSL.  
Antenna on Bldg 803' from DER, 522' right of centerline, 35' AGL/656' MSL.  
Building 3,749' from DER, 569' left of centerline, 114' AGL/723' MSL.  
Floodlight on Bldg 1,611' from DER, 657' left of centerline, 53' AGL/667' MSL.  
Rod on OL building 450' from DER, 317' left of centerline, 20' AGL/637' MSL.
- Rwy 25: Tower 2,828' from DER, 1,225' left of centerline, 141' AGL/770' MSL.  
Multiple trees beginning 909' from DER, 133' left of centerline, up to 76' AGL/703' MSL.  
Multiple trees beginning 334' from DER, 132' right of centerline, 58' AGL/685' MSL.  
OL on building 48' from DER, 240' left of centerline, 41' AGL/662' MSL.  
Railroad 1' from DER, 126' left of centerline, 29' AGL/650' MSL.  
OL on stack 454' from DER, 45' left of centerline, 35' AGL/659' MSL.  
Railroad 190' from DER, 40' left of centerline, 29' AGL/650' MSL.  
OL stack on Bldg 949' from DER, 44' left of centerline, 41' AGL/668' MSL.  
Stack 958' from DER, 12' left of centerline, 41' AGL/668' MSL.  
Light standard 701' from DER, 145' right of centerline, 26' AGL/653' MSL.  
Stack 9,474 from DER, 2,415' left of centerline, 241' AGL/872' MSL.
- Rwy 33: Multiple trees beginning 113' from DER, 118' left of centerline, up to 73' AGL/694' MSL.  
Multiple trees beginning 572' from DER, 84' right of centerline, up to 92' AGL/709' MSL.  
Flag pole 963' from DER, 379' left of centerline, 28' AGL/658' MSL.

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010

(SPRTN.SPRTN3) 10210

ST-118 (FAA)

## SPRTN THREE ARRIVAL

DETROIT, MICHIGAN

DETROIT APP CON

127.5 239.275

WILLOW RUN ATIS 127.425

PONTIAC ATIS 125.025

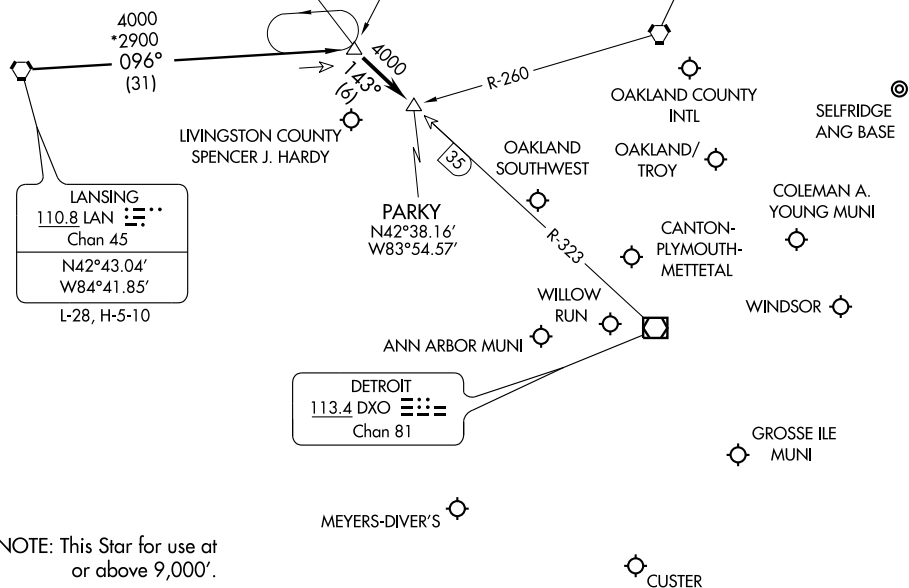
COLEMAN A. YOUNG ATIS 124.875

WINDSOR ATIS 134.5

SELFRIAGE ATIS 125.325 270.1

SPRTN

N42°42.52'-W84°00.23'

VERTICAL NAVIGATION  
PLANNING INFORMATIONTURBOJETS/TURBOPROPS:  
Expect clearance to cross at  
9000'.

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010

**LANSING TRANSITION (LAN.SPRTN3):** From over LAN VORTAC via LAN R-096 to SPRTN INT. Thence . . . .

. . . . Aircraft landing: DET, PTK, VLL, D98, MTC, ARB, YIP, ONZ, 1D2, TTF, Y47, 36MI, OZW, 3TE, YQG: From over SPRTN INT via DXO R-323 to PARKY INT. Thence . . . .

. . . . Expect radar vectors to final approach course.

## SPRTN THREE ARRIVAL

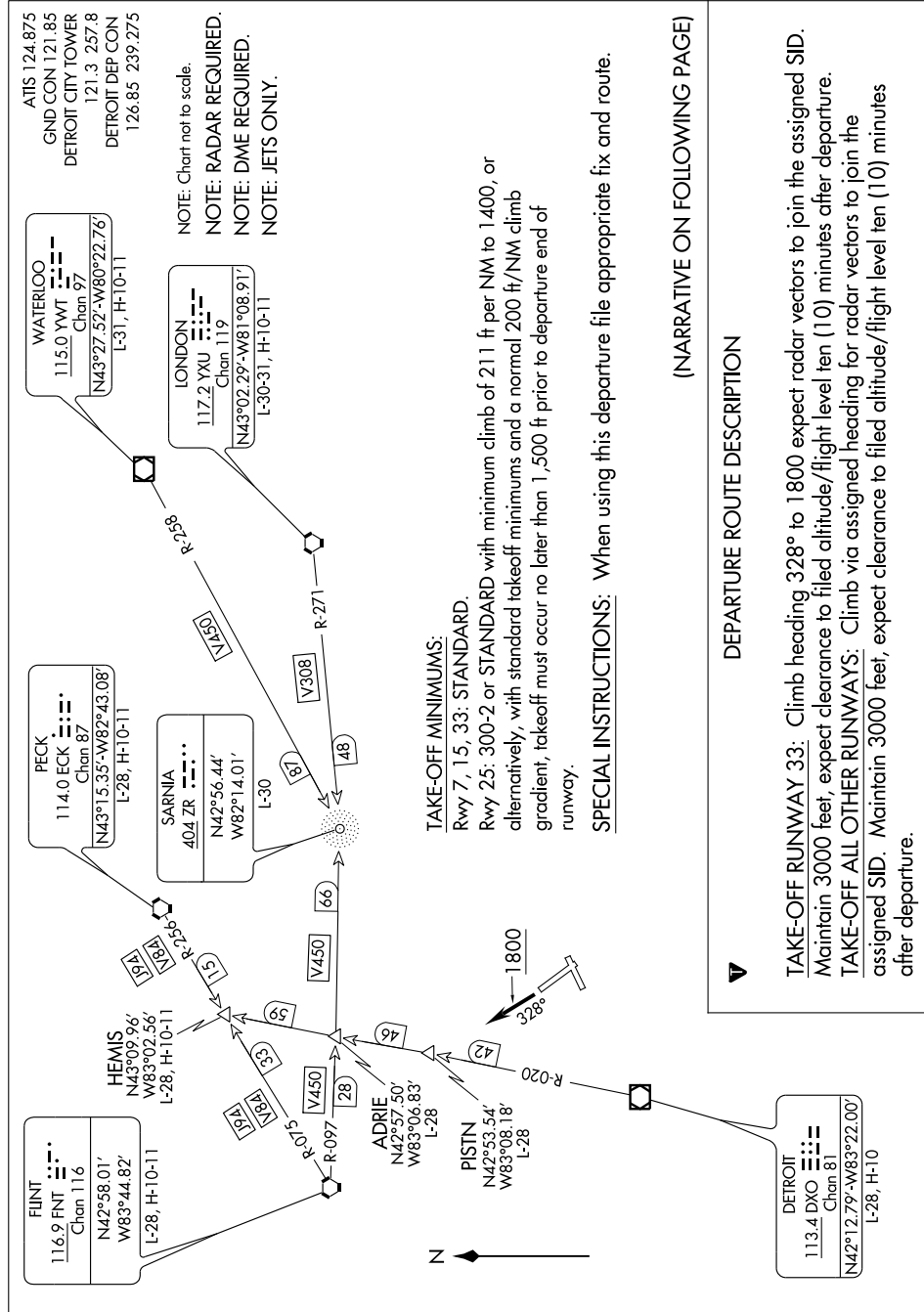
DETROIT, MICHIGAN

(SPRTN.SPRTN3) 10210

(STCLR3.DXO) 08213  
ST. CLAIR THREE DEPARTURE

DETROIT/ COLEMAN A. YOUNG MUNI (DET)  
SL-118 (FAA) DETROIT, MICHIGAN

EC-1, 23 SEP 2010 to 21 OCT 2010



ST. CLAIR THREE DEPARTURE  
(STCLR3.DXO) 08213

DETROIT, MICHIGAN  
DETROIT/ COLEMAN A. YOUNG MUNI (DET)

EC-1, 23 SEP 2010 to 21 OCT 2010

TAKE-OFF OBSTACLES:

- Rwy 7: Multiple Trees beginning 232' from DER, 20' left of centerline, up to 60' AGL/687' MSL.  
Multiple Trees beginning 283' from DER, 44' right of centerline, up to 56' AGL/680' MSL.  
Stack 533' from DER, 66' right of centerline, 50' AGL/671' MSL.  
OL on Stack on Bldg 566' from DER, 18' right of centerline, 50' AGL/671' MSL.  
OL on Floodlight 622' from DER, 104' left of centerline, 41' AGL/668' MSL.  
Light Standard 149' from DER, 138' left of centerline, 37' AGL/654' MSL.  
Light Standard 227' from DER, 105 right of centerline, 33' AGL/654' MSL.  
Antenna on Bldg 936' from DER, 84' right of centerline, 43' AGL/670' MSL.  
OL Floodlight 909' from DER, 96' right of centerline, 41' AGL/668' MSL.  
Pole 466' from DER, 198' right of centerline, 30' AGL/654' MSL.  
OL on Pole 132' from DER, on centerline, 16' AGL/637' MSL.
- Rwy 15: Multiple Trees beginning 589' from DER, 221' left of centerline up to 69' AGL/683' MSL.  
Multiple Trees beginning 299' from DER, 289' right of centerline, up to 52' AGL/679' MSL.  
Ant on APBN 662' from DER, 667' left of centerline, 81' AGL/695' MSL.  
Pipe on OL Bldg 783' from DER, 597' left of centerline, 62' AGL/676' MSL.  
OL on Bldg 1,473' from DER, 556' right of centerline, 68' AGL/692' MSL.  
Tower 3,376' from DER, 1,118' right of centerline, 103' AGL/723' MSL.  
Antenna on Bldg 803' from DER, 522' right of centerline, 35' AGL/656' MSL.  
Building 3,749' from DER, 569' left of centerline, 114' AGL/723' MSL.  
Floodlight on Bldg 1,611' from DER, 657' left of centerline, 53' AGL/667' MSL.  
Rod on OL Building 450' from DER, 317' left of centerline, 20' AGL/637' MSL.
- Rwy 25: Tower 2,828' from DER, 1,225' left of centerline, 141' AGL/770' MSL.  
Multiple Trees beginning 909' from DER, 133' left of centerline, up to 76' AGL/703' MSL.  
Multiple Trees beginning 334' from DER, 132' right of centerline, 58' AGL/685' MSL.  
OL on Building 48' from DER, 240' left of centerline, 41' AGL/662' MSL.  
Railroad 1' from DER, 126' left of centerline, 29' AGL/650' MSL.  
OL on Stack 454' from DER, 45' left of centerline, 35' AGL/659' MSL.  
Railroad 190' from DER, 40' left of centerline, 29' AGL/650' MSL.  
OL Stack on Bldg 949' from DER, 44' left of centerline, 41' AGL/668' MSL.  
Stack 958' from DER, 12' left of centerline, 41' AGL/668' MSL.  
Light Standard 701' from DER, 145' right of centerline, 26' AGL/653' MSL.  
Stack 9,474 from DER, 2,415' left of centerline, 241' AGL/872' MSL.
- Rwy 33: Multiple Trees beginning 113' from DER, 118' left of centerline, up to 73' AGL/694' MSL.  
Multiple Trees beginning 572' from DER, 84' right of centerline, up to 92' AGL/709' MSL.  
Flag Pole 963' from DER, 379' left of centerline, 28' AGL/658' MSL.

VOR/DME YQG <b>113.8</b> Chgn <b>85</b>	APP CRS <b>326°</b>	Rwy Idg <b>5090</b> TDZE <b>626</b> Apt Elev <b>626</b>
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VOR RWY 33

DETROIT/ COLEMAN A. YOUNG MUNI (DET)

**▼** Visibility reduction by helicopters NA. When local altimeter setting not received, use Detroit Metro Wayne County altimeter setting and increase all MDA 60 feet and increase Cat C and D visibility ¼ mile.

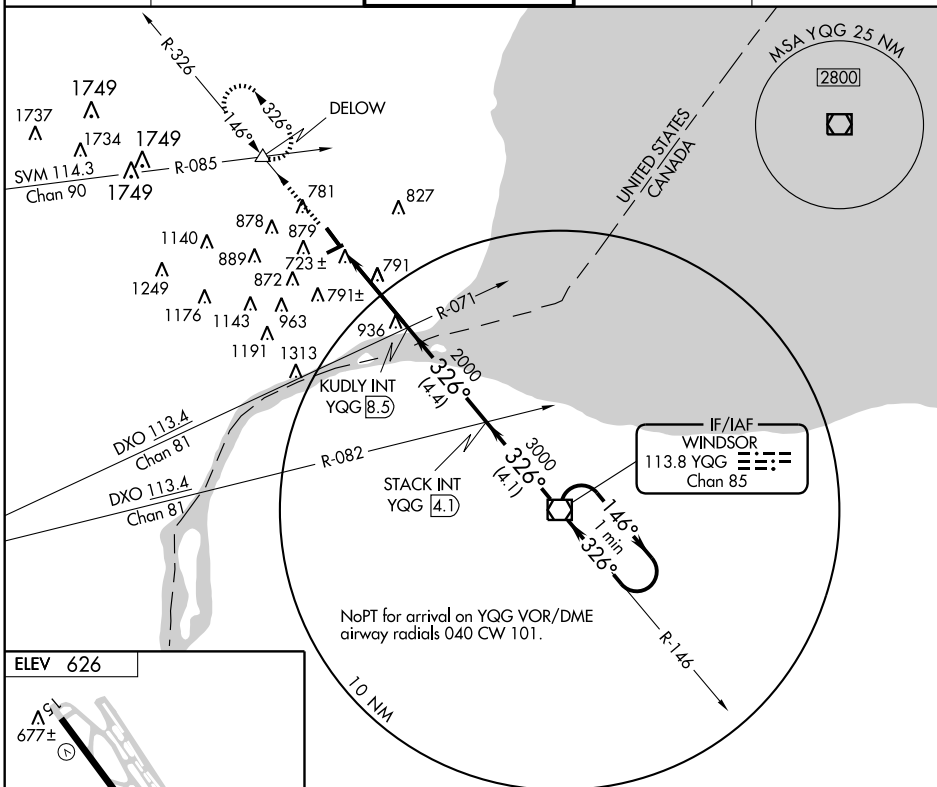
**MISSED APPROACH:** Climb to 3000 via YQG VOR/DME R-326 to DELOW Int and hold, continue climb-in-hold to 3000.

ATIS  
124.875

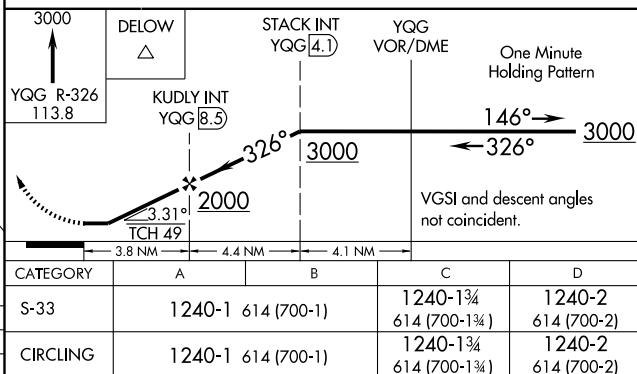
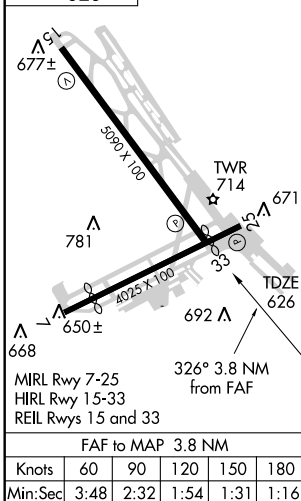
DETROIT APP CON  
126.85 363.2

DETROIT CITY TOWER  
121.3 257.8

GND CON  
121.85

UNICOM  
122.95

ELEV 626



DETROIT, MICHIGAN

Amdt 28 09295

DETROIT/ COLEMAN A. YOUNG MUNI (DET)

42°25'N - 83°01'W

VOR RWY 33

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1. 23 SEP 2010 to 21 OCT 2010

## AIRPORT DIAGRAM

AL-119 (FAA)

DETROIT METROPOLITAN WAYNE COUNTY (DTW)  
DETROIT, MICHIGAN

ATIS  
133.675  
METRO TOWER  
118.4 287.1 (EAST)  
135.0 287.1 (WEST)  
CLNC DEL  
120.65

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.  
READBCK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

RWYS 03L-21R, 04R-22L, 09L-27R, 09R-27L  
S-100, D-185, 2S-175, 2D-350

RWYS 03R-21L, 04L-22R

S-100, D-200, 2S-175, 2D-350, 2D/2D2-750

NORTHWEST  
GND CON  
121.8

U.S. CUSTOMS  
ASIG NORTH

42°14'N

JANUARY 2010  
ANNUAL RATE OF CHANGE  
0.0° W

NORTHEAST  
GND CON  
119.45

42°13'N

42°12'N

FIELD  
ELEV  
645

SOUTHWEST  
GND CON  
132.72

SOUTHEAST  
GND CON  
119.25

ASDE-X Surveillance System in use.  
Pilots should operate transponders  
with Mode C on all twys and rwys.

83°23'W

83°22'W

83°21'W

83°20'W

## AIRPORT DIAGRAM

DETROIT, MICHIGAN  
DETROIT METROPOLITAN WAYNE COUNTY (DTW)

## DETROIT METROPOLITAN WAYNE CO

(DTW) 15 S UTC-5(-4DT) N42°12.75' W83°21.20'

DETROIT

645 B S2 FUEL 100LL, JET A OX 1, 3, 4 AOE Class I, ARFF Index E NOTAM FILE DTW

COPTER

RWY 04R-22L: H12003X200 (CONC-GRVD) S-100, D-185, 2S-175, 2D-350 HIRL CL

H-10G, L-28J, A

RWY 04R: ALSF2. TDZL. Tree. RWY 22L: MALSR. Railroad.

IAP, AD

RWY 03R-21L: H10001X150 (CONC-GRVD) S-100, D-200, 2S-175, 2D-350, 2D/2D2-750 HIRL CL

RWY 03R: ALSF2. TDZL. PAPI(P4R)—GA 3.0° TCH 54'. Trees.

RWY 21L: MALSR. PAPI(P4L)—GA 3.0° TCH 55'. Berm.

RWY 04L-22R: H10000X150 (CONC-GRVD) S-100, D-200, 2S-175, 2D-350, DDT-750 HIRL CL

RWY 04L: ALSF2. TDZ. Pole. RWY 22R: MALSR. Antenna.

RWY 09L-27R: H8708X150 (ASPH-CONC-GRVD) S-100, D-185, 2S-175, 2D-350 HIRL

RWY 09L: REIL. Antenna.

RWY 27R: MALSR. PAPI(P4L)—GA 3.0° TCH 61'.

RWY 03L-21R: H8501X200 (ASPH-CONC-GRVD) S-100, D-185, 2S-175, 2D-350 HIRL CL

RWY 03L: REIL. PAPI(P4R)—GA 3.0° TCH 58'. Pole.

RWY 21R: REIL. PAPI(P4L)—GA 3.0° TCH 59'. Pole.

RWY 09R-27L: H8500X150 (CONC-GRVD) S-100, D-185, 2S-175, 2D-350 HIRL CL

RWY 09R: REIL.

RWY 27L: MALSR. PAPI(P4L)—GA 3.0° TCH 55'.

## RUNWAY DECLARED DISTANCE INFORMATION

RWY 03L:	TORA-8501	TODA-8501	ASDA-8501	LDA-8501
RWY 03R:	TORA-10001	TODA-10001	ASDA-10001	LDA-10001
RWY 04L:	TORA-10000	TODA-10000	ASDA-10000	LDA-10000
RWY 04R:	TORA-12003	TODA-12003	ASDA-12003	LDA-12003
RWY 09L:	TORA-8708	TODA-8708	ASDA-8618	LDA-8618
RWY 09R:	TORA-8500	TODA-8500	ASDA-8500	LDA-8500
RWY 21L:	TORA-10001	TODA-10001	ASDA-10001	LDA-10001
RWY 21R:	TORA-8501	TODA-8501	ASDA-8501	LDA-8501
RWY 22L:	TORA-12003	TODA-12003	ASDA-12003	LDA-12003
RWY 22R:	TORA-10000	TODA-10000	ASDA-10000	LDA-10000
RWY 27L:	TORA-8500	TODA-8500	ASDA-8500	LDA-8500
RWY 27R:	TORA-8708	TODA-8708	ASDA-8708	LDA-8708

**AIRPORT REMARKS:** Attended continuously. Be alert birds, waterfowl on and in/ovf arpt. Rwy 21R departures be alert for optical illusion, acft taxiing on Twy T may appear as though crossing Rwy 21R centerline. Rwy 22L departures be alert for optical illusion, acft taxiing on Twy Q may appear as though crossing Rwy 22L centerline. Brightly lgtd parking lot 2.6 NM SW of arpt. ASDE-X surveillance system in use: pilots should operate transponders with mode C on all twys and rwys. Rwy 03R ALSF2 req when RVR/visibility is 6000/1 mile or less. SSALR ops when RVR/visibility is 6000/1 mile. Rwy 03L-21R touchdown and rollout rwy visual range avbl. Rwy 04L-22R touchdown, midfield and rollout rwy visual range avbl. Rwy 09L rwy visual range midfield avbl. Rwy 27L touchdown rwy visual range avbl. Acft on Twy F and Twy V do not block fire station exits. Twy G N of Twy V is a non-movement area. Unidirectional stop bars on Rwy 27R when being used for taxi. Ldg fee. Flight Notification Service (ADCUS) available.

**WEATHER DATA SOURCES:** ASOS (734) 941-7848. LLWAS. TDWR.

**COMMUNICATIONS:** D-ATIS 133.675 734-941-5363 UNICOM 122.95

CARLETON RCO 122.1R 115.7T (LANSING RADIO)

APP CON 125.15 118.575 (EAST) 124.05 (WEST) 124.975 124.25

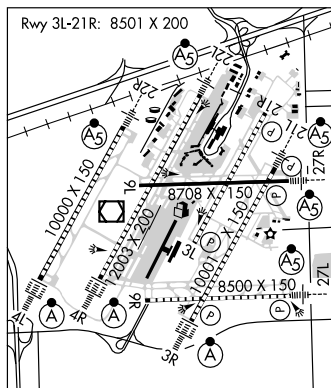
DEP CON 132.025 (TURBOJETS-EAST) 134.3 (TURBOPROPS-EAST) 125.525 (TURBOJETS-WEST) 118.95 (TURBOPROP-WEST) 118.575 (EAST)

METRO TOWER 135.0 (West) 128.125 (Rwy 04L-22R) 118.4 (East)

GND CON 121.8 (NORTHWEST) 132.72 (SOUTHWEST) 119.25 (SOUTHEAST) 119.45 (NORTHEAST)

CLNC DEL 120.65 PRE TAXI CLNC 120.65

**AIRSPACE:** CLASS B: See VFR Terminal Area Chart.



## CONTINUED FROM PRECEDING PAGE

## RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

CARLETON (H) VORTAC 115.7 CRL Chan 104 N42°02.88' W83°27.45' 028° 10.9 NM to fld.  
629/3W. HIWAS.

(H) VORW/DME 113.4 DXO Chan 81 N42°12.79' W83°22.00' at fld. 638/6W. NOTAM FILE DTW.  
DME unusable byd 30 NM below 2900'.

REVUP NDB (LOM) 388 DT N42°07.21' W83°25.90' 038° 6.6 NM to fld. Unmonitored. SHUTDOWN.

SPENC NDB (LOM) 223 DM N42°13.20' W83°12.20' 272° 6.7 NM to fld.

ILS/DME 111.95 I-HJT Chan 56Y Rwy 04L. Class IIE. DME also serves Rwy 22R.

ILS/DME 110.7 I-DTW Chan 44 Rwy 04R. LOM REVUP NDB. OM unmonitored. LOM SHUTDOWN.

ILS/DME 110.7 I-DWC Chan 44 Rwy 22L. Class IE.

ILS/DME 111.95 I-JKI Chan 56Y Rwy 22R. Class IE. DME also serves Rwy 04R.

ILS/DME 111.5 I-HUU Chan 52 Rwy 03R.

ILS/DME 111.5 I-EJR Chan 52 Rwy 21L.

ILS 108.5 I-DMI Rwy 27R. LOM SPENC NDB.

ILS 110.15 I-EPA Rwy 27L. Class IE.

COMM/NAV/WEATHER REMARKS: Dual VHF communications required for Simultaneous Close Parallel ILS PRM Approaches. Rwy 04L and Rwy 22R Monitor 127.05, Rwy 04R and Rwy 22L Monitor 135.775 and Rwy 03R and Rwy 21L Monitor 128.35.

**WILLOW RUN** (YIP) 24 SW UTC-5(-4DT) N42°14.36' W83°31.86'

716 B S4 FUEL 100LL, JET A OX 1, 3 LRA ARFF Index—See Remarks NOTAM FILE YIP **DETROIT COPTER**

RWY 05R-23L: H7526X150 (ASPH) S-55, D-70, 2S-89, 2D-120 MIRL

H-10G, L-28J, A

RWY 05R: MALSR. Tree.

IAP, AD

RWY 23L: MALSR. VASI(V4L)—GA 3.0° TCH 56'.

RWY 09-27: H7294X160 (ASPH-GRVD) S-55, D-70, 2S-89,  
2D-120 MIRL

RWY 09: Thld displcd 574'. Railroad.

RWY 14-32: H6312X160 (ASPH-GRVD) S-35, D-45, 2D-90 MIRL

RWY 14: Antenna.

RWY 32: REIL. PAPI(P4L)—GA 3.5° TCH 45'. Thld displcd 525'.  
Ground.

RWY 05L-23R: H5995X160 (ASPH-GRVD) S-35, D-45, 2D-90  
MIRL

RWY 05L: Trees. RWY 23R: Trees.

## RUNWAY DECLARED DISTANCE INFORMATION

RWY 05L: TORA-5995 TODA-5995 ASDA-5995 LDA-5995

RWY 23R: TORA-5995 TODA-5995 ASDA-5995 LDA-5995

**AIRPORT REMARKS:** Attended continuously. Helicopter tkr and ldg on the south ramp prohibited, taxi only. Birds on and in/ovf arpt. Rwy 09-27, only the 80' center portion is grvd. Class IV, ARFF Index A. ARFF Index E svc avbl on req call 734-485-6660. 48 hr PPR for unscheduled air carrier ops with more than 30 passenger seats requiring Index C or greater call arpt manager 734-485-6670. Flight Notification Service (ADCUS) avbl call 734-942-9000. Customs avbl 24 hrs, Mon-Fri and on call from Detroit Metropolitan Wayne Co arpt on weekend. U.S. customs user fee arpt. All billing thru Wayne Co. Arpt Authority; For customs clearance 1 hr minimum advance notification rqr. Pilots must ctc U.S. customs on 313-226-3140. Req for customs svc by FAA flight plan is not accepted. Ldg fee. Ldg fee is based on acft gross weight.

**WEATHER DATA SOURCES:** ASOS 132.350 (734) 485-9056. LAWRS.

**COMMUNICATIONS:** ATIS 127.425 (734) 482-6590

**(R) DETROIT APP/DEP CON** 118.95

TOWER 125.275 GND CON 121.75

## RADIO AIDS TO NAVIGATION: NOTAM FILE DTW.

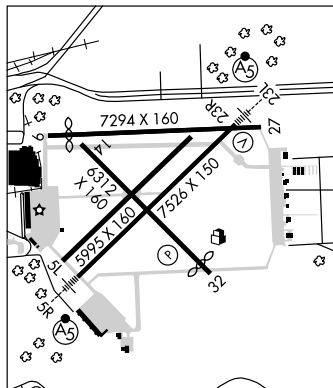
DETROIT (H) VORW/DME 113.4 DXO Chan 81 N42°12.79' W83°22.00' 288° 7.5 NM to fld. 638/6W.

YIPPS NDB (LOM) 359 YI N42°10.45' W83°37.29' 052° 5.6 NM to fld. Unmonitored.

ILS/DME 109.5 I-YIP Chan 32 Rwy 05R. Class IE. LOM YIPPS NDB.

ILS/DME 109.5 I-LSW Chan 32 Rwy 23L. Class IE.

COMM/NAV/WEATHER REMARKS: Emerg frequencies not avbl at twr.



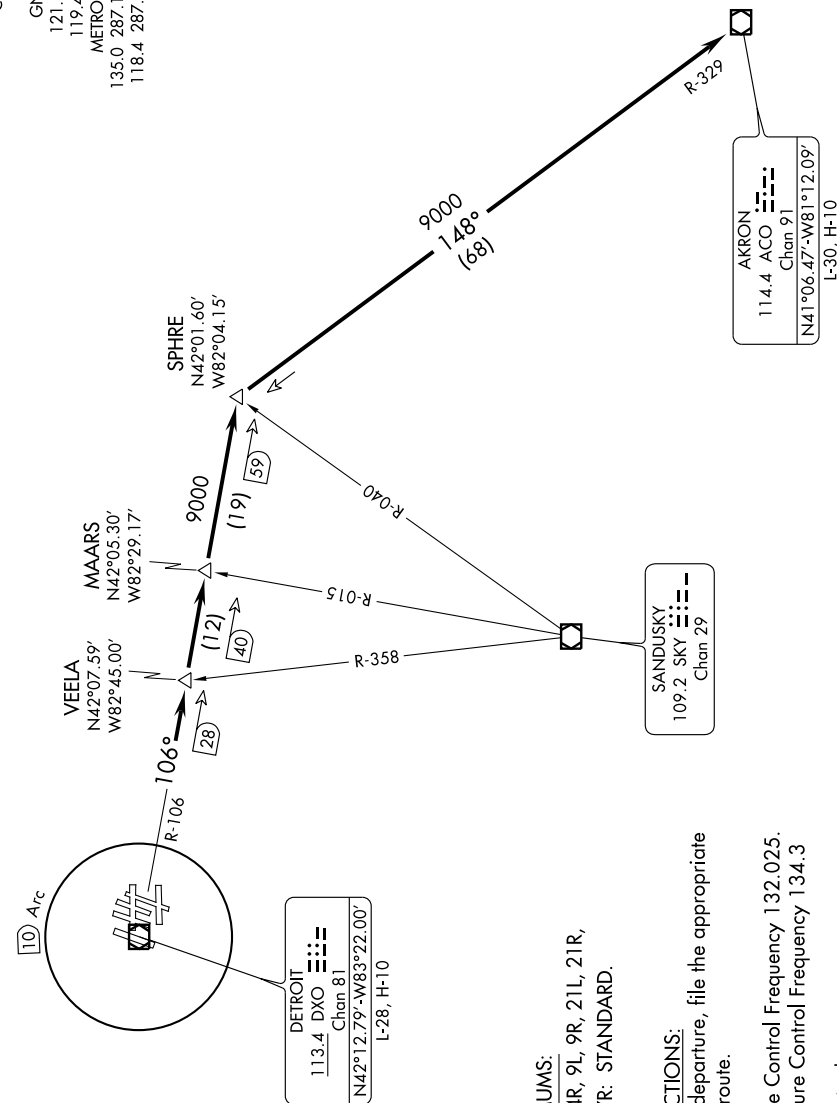


# AKRON TWO DEPARTURE

SL-119 (FAA)

DETROIT, MICHIGAN

ATIS 133.675  
CLNC DEL  
120.65  
GND CON  
121.8 WEST  
119.45 EAST  
METRO TOWER  
135.0 287.1 (WEST)  
118.4 287.1 (EAST)



(NARRATIVE ON FOLLOWING PAGE)

EC-1, 23 SEP 2010 to 21 OCT 2010

## TAKE-OFF MINIMUMS:

Rwys 3L, 3R, 4L, 4R, 9L, 9R, 21L, 21R,  
22L, 22R, 27L, 27R: STANDARD.

## SPECIAL INSTRUCTIONS:

When using this departure, file the appropriate  
depicted fix and route.

Jets use Departure Control Frequency 132.025.  
Props use Departure Control Frequency 134.3

NOTE: Radar Required.

NOTE: Chart not to scale.

# AKRON TWO DEPARTURE

DETROIT, MICHIGAN

DETROIT METROPOLITAN WAYNE COUNTY (DTW)

## AKRON TWO DEPARTURE

SL-119 (FAA)

DETROIT, MICHIGAN



## DEPARTURE ROUTE DESCRIPTION

TAKE-OFF ALL RUNWAYS: Climb via assigned heading for radar vectors to intercept DXO VOR/DME R-106, to SPHRE INT, then via ACO R-329 to ACO VOR/DME. Jets maintain 10,000 feet, cross DXO 10 DME Arc at or above 5,000 feet for noise abatement. If unable to comply, advise ATC prior to departure. Props maintain 4,000 feet or lower assigned altitude. Expect clearance to filed altitude/flight level ten (10) minutes after departure.

TAKE-OFF OBSTACLES

Rwy 3R: Headwall 399' from DER, 566' right of centerline, 17' AGL/647' MSL.

Rwy 4L: Multiple Trnsn Towers 1516' from DER, 827' left of centerline, up to 60' AGL/690' MSL.

Multiple Antennas 2751' from DER, 762' right of centerline, up to 84' AGL/714' MSL.

Rwy 4R: Antenna on Bldg 3348' from DER, 1301' left of centerline, 100' AGL/736' MSL.

Rwy 9L: Multiple Trees 968' to 2519' from DER, 462' left of centerline and 1173' right of centerline, up to 85' AGL/715' MSL.

Rwy 9R: Tree 1837' from DER, 947' right of centerline, 50' AGL/686' MSL.

Rwy 21L: Multiple Trees 1079' to 3910' from DER, 586' left of centerline and 1188' right of centerline, up to 100' AGL/733' MSL.

Rwy 22L: Multiple Trees 794' to 3694' from DER, 611' right of centerline and 1381' left of centerline, up to 110' AGL/740' MSL.

Rwy 27R: Rod on ASR 4461' from DER, 464' left of centerline, 106' AGL/756' MSL.

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010





DEPARTURE ROUTE DESCRIPTION

TAKE-OFF ALL RUNWAYS: Climb via assigned heading for radar vectors to intercept DXO VOR/DME R-095 to OCTAS INT then via YQG R-101 to ERRTH, then via (transition). Jets maintain 10,000 feet, cross DXO VOR/DME 10 DME at or above 5,000 feet for noise abatement. If unable to comply, advise ATC prior to departure. Props maintain 4,000 feet or lower assigned altitude. Expect clearance to filed altitude/flight level ten (10) minutes after departure.

CHARDON TRANSITION (ERRTH2.CXR): From over ERRTH INT via CXR R-325 to CXR VOR/DME.

KEATING TRANSITION (ERRTH2.ETG): From over ERRTH INT via CXR R-325 to CXR VOR/DME, then via CXR R-102 and ETG R-289 to MIGET INT, then via ETG R-289 to ETG VORTAC.

SLATE RUN TRANSITION (ERRTH2.SLT): (DME Required) From over ERRTH INT via YQG R-101 to TRACE INT, then via ECK R-139 to DORET INT, then via SLT R-287 to SLT VORTAC.

TAKE-OFF OBSTACLES

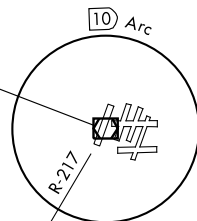
- Rwy 3R: Headwall 399' from DER, 566' right of centerline, 17' AGL/647' MSL.
- Rwy 4L: Multiple transmission towers 1516' from DER, 827' left of centerline, up to 60' AGL/690' MSL.  
Multiple antennas 2751' from DER, 762' right of centerline, up to 84' AGL/714' MSL.
- Rwy 4R: Antenna on building 3348' from DER, 1301' left of centerline, 100' AGL/736' MSL.
- Rwy 9L: Multiple trees 968' to 2519' from DER, 462' left of centerline and 1173' right of centerline, up to 85' AGL/715' MSL.
- Rwy 9R: Tree 1837' from DER, 947' right of centerline, 50' AGL/686' MSL.
- Rwy 21L: Multiple trees 1079' to 3910' from DER, 586' left of centerline and 1188' right of centerline, up to 100' AGL/733' MSL.
- Rwy 22L: Multiple trees 794' to 3694' from DER, 611' right of centerline and 1381' left of centerline, up to 110' AGL/740' MSL.
- Rwy 27R: Rod on ASR, 4461' from DER, 464' left of centerline, 106' AGL/756' MSL.

## FORT WAYNE THREE DEPARTURE

DETROIT METROPOLITAN WAYNE COUNTY (DTW)  
SL-119 (FAA) DETROIT, MICHIGAN

ATIS 133.675  
CLNC DEL  
120.65  
GND CON  
121.8 WEST  
119.45 EAST  
METRO TOWER  
135.0 287.1 (WEST)  
118.4 287.1 (EAST)

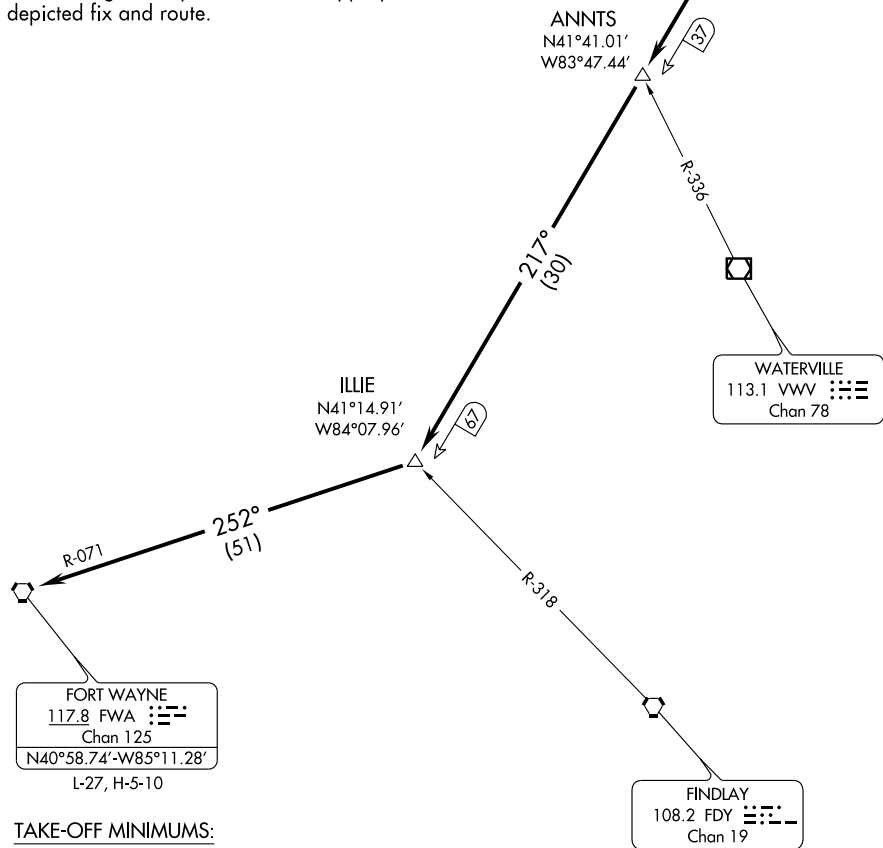
DETROIT  
113.4 DXO   
Chan 81  
N42°12.79'-W83°22.00'  
L-28, H-10

SPECIAL INSTRUCTIONS:

Jets only.

Use Departure Control Frequency 125.525.

When using this departure, file the appropriate depicted fix and route.

TAKE-OFF MINIMUMS:

Rwys 3L, 3R, 4L, 4R, 9L, 9R,  
21L, 21R, 22L, 22R, 27L, 27R: STANDARD.

NOTE: RADAR Required.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

## FORT WAYNE THREE DEPARTURE



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF ALL RUNWAYS: Climb via assigned heading for radar vectors to intercept DXO VOR/DME R-217 to ILLIE INT, then via FWA R-071 to FWA VORTAC. Maintain 10,000 feet, cross DXO VOR/DME 10 DME at or above 5,000 feet for noise abatement. If unable to comply, advise ATC prior to departure. Expect clearance to filed flight level ten (10) minutes after departure.

TAKE-OFF OBSTACLES:

- Rwy 3R: Headwall 399' from DER, 566' right of centerline, 17' AGL/647' MSL.
- Rwy 4L: Multiple Trnsn towers 1516' from DER, 827' left of centerline, up to 60' AGL/690' MSL.  
Multiple antennas 2751' from DER, 762' right of centerline, up to 84' AGL/714' MSL.
- Rwy 4R: Antenna on building 3348' from DER, 1301' left of centerline, 100' AGL/736' MSL.
- Rwy 9L: Multiple trees 968' to 2519' from DER, 462' left of centerline and 1173' right of centerline, up to 85' AGL/715' MSL.
- Rwy 9R: Tree 1837' from DER, 947' right of centerline, 50' AGL/686' MSL.
- Rwy 21L: Multiple trees 1079' to 3910' from DER, 586' left of centerline and 1188' right of centerline, up to 100' AGL/733' MSL.
- Rwy 22L: Multiple trees 794' to 3694' from DER, 611' right of centerline to 1381' left of centerline, up to 110' AGL/740' MSL.
- Rwy 27R: Rod on ASR, 4461' from DER, 464' left of centerline, 106' AGL/756' MSL.

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010


(DJB.GEMNI2) 08325


# GEMNI TWO ARRIVAL

ST-119 (FAA)

DETROIT METROPOLITAN WAYNE COUNTY  
DETROIT, MICHIGAN

ATIS 133.675  
DETROIT APP CON  
126.22 363.2

DETROIT  
113.4 DXO   
Chan 81

WINDSOR  
113.8 YQG   
Chan 85


GEMNI  
N41°43.58'  
W82°46.82'

## VERTICAL NAVIGATION PLANNING INFORMATION

Turbojets: Expect clearance to cross at 12,000 feet.  
Props: Expect clearance to cross at 11,000 feet.

GLOZE  
N42°06.85'  
W83°14.79'

TRYBE  
N41°40.15'  
W82°41.00'

DRYER  
113.6 DJB   
Chan 83  
N41°21.48'-W82°09.72'  
L-30, H-10

MUSCA'  
N41°54.95'  
W83°00.43'

WATERVILLE  
3.1 VWV   
Chan 78


BOBCI —  
N40°32.93'  
W82°00.77'

BLISS  
N40°19.64'  
W81°58.36'

OTMAN  
N39°56.82'  
W81°54.26'

BELLAIRE  
117.1 AIR   
Chan 118

ELLWOOD CITY  
115.8 EWC :-=.  
Chan 82

ARMEL  
3.5 AML   
Chan 82


ROSEWOOD  
117.5 ROD   
Chan 122

APPLETON  
116.7 APE :-  
Chan 114

N39°42.65  
W81°51.74  
H-10

N39°23.53'  
W81°44.23'

CHARLESTON  
117.4 HVQ ⋮⋮⋮  
Chan 121

BECKLEY  
117.7 BKW   
Chan 124  
N37°46.82'  
W81°07.41'  
L-26, H-10-12

TARCI /  
N38°16.60'  
W81°18.57'

GEFFS  
N39°00.83'  
W80°48.83'


SINDE  
N39°00.29'  
W80°05.36'

$$\triangle \vdash 281^\circ \angle$$

(34)

25 MAA FL 410  
FL 300  
288°

BIGAL  
N37°59.54  
W79°37.24

MONTEBELLO  
115.3 MOL   
Chan 100  
N37°54.03'  
W79°06.41'

NOTE: DME Required.  
NOTE: RADAR Required.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

# GEMNI TWO ARRIVAL

(DJB.GEMNI2) 08325

DETROIT METROPOLITAN WAYNE COUNTY

DETROIT, MICHIGAN

EC-1, 23 SEP 2010 to 21 OCT 2010

ARRIVAL ROUTE DESCRIPTION

BECKLEY TRANSITION (BKW.GEMNI2): From over BKW VORTAC via BKW R-350 to JAMOX INT, then via DJB R-177 to DJB VOR/DME. Thence. . . .

MONTEBELLO TRANSITION (MOL.GEMNI2): From over MOL VOR/DME via MOL R-288 to BIGAL INT, then via HVQ R-104 to TARCI INT, then via BKW R-350 to JAMOX INT, then via DJB R-177 to DJB VOR/DME. Thence. . . .

SINDE TRANSITION (SINDE.GEMNI2): From over SINDE INT via AML R-281 to GEFFS INT, then via ROD R-121 to VLADY INT, then via BKW R-350 to JAMOX INT, then via DJB R-177 to DJB VOR/DME. Thence. . . .

. . . . From over DJB VOR/DME via R-314 to GEMNI INT/36 DME, then via DXO VOR/DME R-144, to GLOZE INT/8 DME. Expect radar vectors to final approach course.

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010



## HOT SPOTS

An "airport surface hot spot" is a location on an aerodrome movement area with a history or potential risk of collision or runway incursion, and where heightened attention by pilots/drivers is necessary.

A "hot spot" is a runway safety related problem area on an airport that presents increased risk during surface operations. Typically it is a complex or confusing taxiway/taxiway or taxiway/runway intersection. The area of increased risk has either a history of or potential for runway incursions or surface incidents, due to a variety of causes, such as but not limited to: airport layout, traffic flow, airport marking, signage and lighting, situational awareness, and training. Hot spots are depicted on airport diagrams as open circles or polygons designated as "HS 1", "HS 2", etc. and tabulated in the list below with a brief description of each hot spot. Hot spots will remain charted on airport diagrams until such time the increased risk has been reduced or eliminated.

CITY/AIRPORT	HOT SPOT	DESCRIPTION*
DETROIT, MI		
DETROIT METROPOLITAN		
WAYNE COUNTY (DTW)	HS 1	Rwy 04R-22L and Rwy 09L-27R.
	HS 2	Rwy 03L-21R and Rwy 09L-27R.
	HS 3	Twy F and Rwy 03L-21R.
DETROIT, MI		
WILLOW RUN (YIP)	HS 1	Complex rwys/twy int.
	HS 2	Twy E1 to Rwy 27 or Rwy 23L wrong rwy departure risk.
JACKSON, MI		
JACKSON COUNTY-		
REYNOLDS FIELD (JXN)	HS 1	Confusing signage.
	HS 2	No signage.
KALAMAZOO, MI		
KALAMAZOO/BATTLE		
CREEK INTL (AZO)	HS 1	Complex rwy/twy int.
	HS 2	Wrong rwy departure risk from Twy C.
	HS 3	Wrong rwy departure risk from Twy F.

\*See appropriate A/FD, Alaska or Pacific Supplement HOT SPOT table for additional information.



LOC/DME I-DTW <b><u>110.7</u></b> Chn <b>44</b>	APP CRS <b>035°</b>	Rwy Idg <b>12003</b> TDZE <b>638</b> Apt Elev <b>645</b>
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ILS or LOC RWY 4R  
DETROIT METROPOLITAN WAYNE COUNTY (DTW)

**T** Simultaneous approach authorized with ILS Rwy 3R.  
ADF and DME or Radar Required.

ALSF-2



**MISSED APPROACH:** Climb to 3000 then right turn direct MADDS LOM and hold.

ATIS  
133.675

DETROIT APP CON  
124.05 363.2 (WEST)  
125.15 363.2 (EAST)

METRO TOWER  
135.0 287.1 (WEST)  
118.4 287.1 (EAST)

	GND CON	
121.8 (NW)	119.45 (NE)	
123.72 (SW)	119.25 (SE)	

CLNC DEL  
120-65

ALTERNATE MISSED APCH FIX



PONTIAC  
1.0 PSI  
Chan 47

1.391

LOCALIZER 110.7  
I-DTW  $\begin{smallmatrix} \cdot & \cdot \\ \cdot & \cdot \\ \cdot & \cdot \end{smallmatrix}$   
Chgn 44

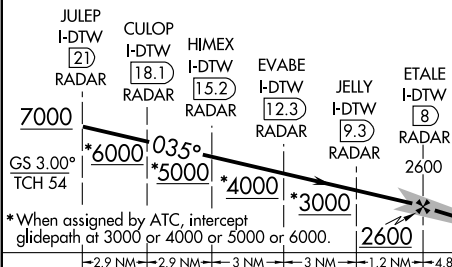
MISSED APCH FIX
-----------------

MADDS  
8 DF  $\bar{\cdot}\cdot$ 

## RADAR REQUIRED

ELEV 645

**D**



\*When assigned by ATC, intercept glidepath at 3000 or 4000 or 5000 or 6000.

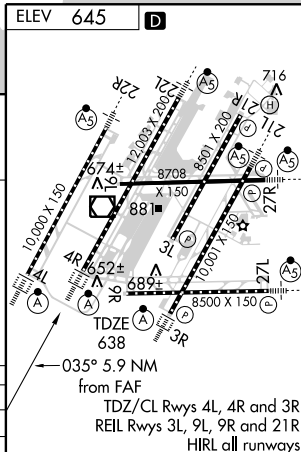
CATEGORY	A	B	C
S-ILS 4R	838/18 200 (200-1/2)		

S-LOC 4R	1040/24 402 (400-1/2)
----------	-----------------------

CIRCLING	1200-1 555 (600-1)
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1200-1½	1200-2
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555 (600-1½)	555 (600-2)
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FAE to MAP 5.9 NM

Keats	40	80	120	150	180
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Knots	60	90	120	150	180
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	5:54	3:56	2:57	2:22	1:58
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DETROIT, MICHIGAN

Amdt 16 10266

DETROIT METROPOLITAN WAYNE COUNTY (DTW)

42°13'N - 83°21'W

ILS or LOC RWY 4R

LOC/DME I-EJR <b>111.5</b> Chan <b>52</b>	APP CRS <b>215°</b>	Rwy Idg TDZE Apt Elev <b>10001</b> <b>632</b> <b>645</b>
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## ILS or LOC RWY 21L

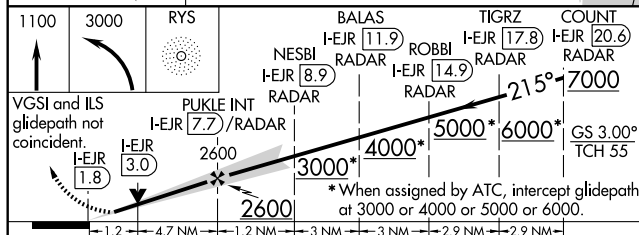
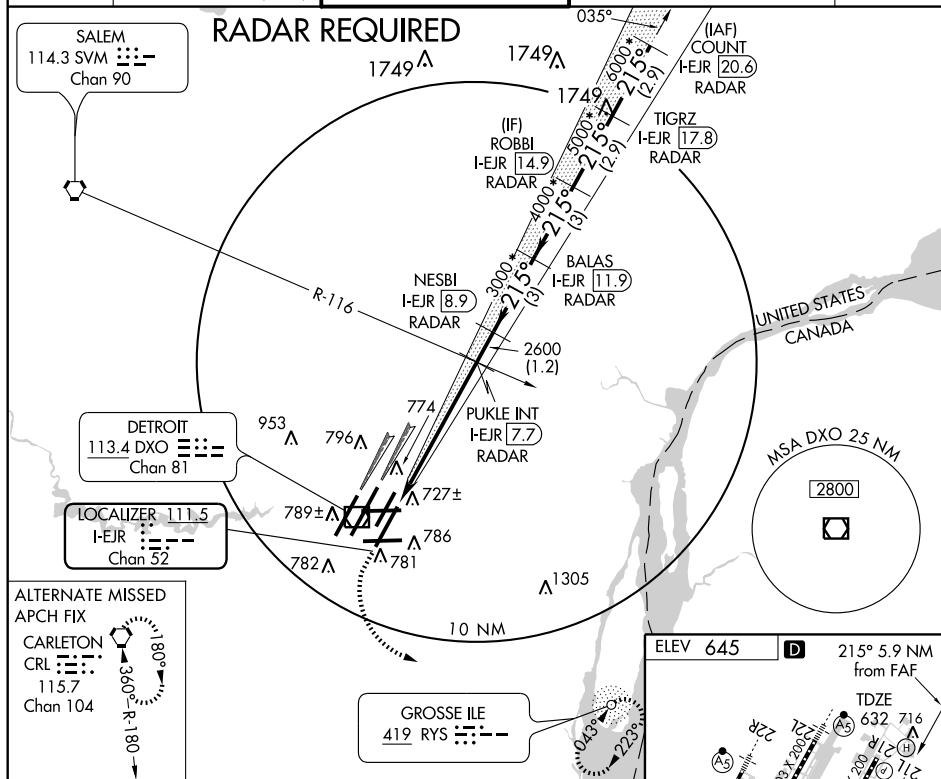
DETROIT METROPOLITAN WAYNE COUNTY (DTW)

Simultaneous approach authorized with Rwy 22L or Rwy 22R. ADF and DME or RADAR Required. LOC procedure NA during simultaneous operations.  
\*\* RVR 1800 authorized with the use of FD or AP or HUD to DA.

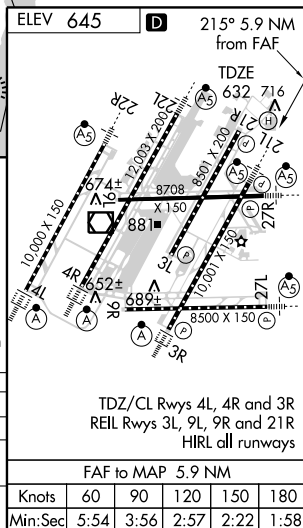


MISSED APPROACH: Climb to 1100 then climbing left turn to 3000 direct RYS NDB and hold.

ATIS <b>133.675</b>	DETROIT APP CON <b>124.05 363.2</b> (WEST) <b>125.15 363.2</b> (EAST)	METRO TOWER <b>135.0 287.1</b> (WEST) <b>118.4 287.1</b> (EAST)	GND CON <b>121.8</b> (NW) <b>119.45</b> (NE) <b>123.72</b> (SW) <b>119.25</b> (SE)	CLNC DEL <b>120.65</b>
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CATEGORY	A	B	C	D
S-ILS 21L	** 832/24 200 (200-½)			
S-LOC 21L	1100/24 468 (500-½)	1100/40 468 (500-¾)	1100/50 468 (500-1)	
CIRCLING	1200-1 555 (600-1)	1200-1½ 555 (600-1½)	1200-2 555 (600-2)	



LOC/DME I-DWC <b>110.7</b> Chan <b>44</b>	APP CRS <b>215°</b>	Rwy Idg TDZE <b>637</b> Apt Elev <b>645</b>	<b>12003</b>
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## ILS or LOC RWY 22L

DETROIT METROPOLITAN WAYNE COUNTY (DTW)

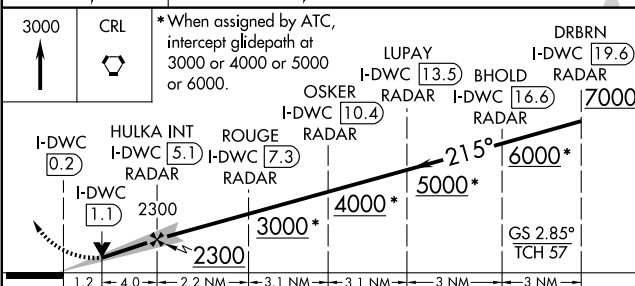
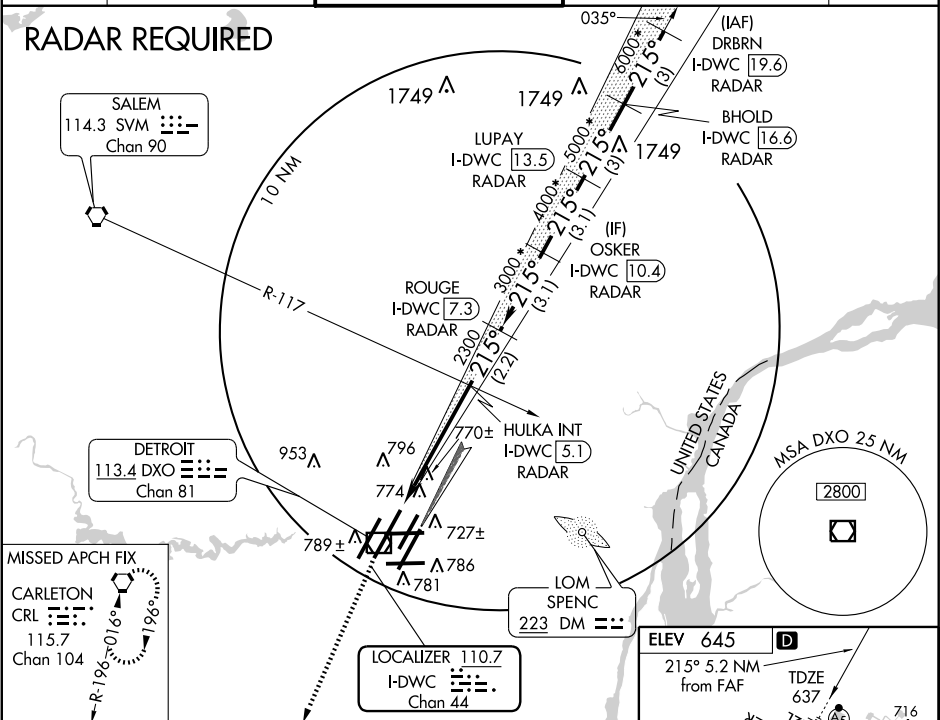
**Simultaneous approach authorized with Rwy 21L. DME or RADAR Required. LOC procedure NA during simultaneous operations.**  
**\*\*RVR 1800 authorized with the use of FD or AP or HUD to DA.**



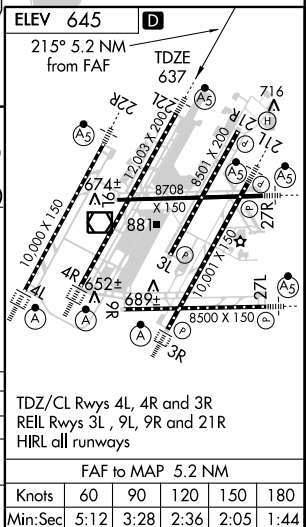
**MISSED APPROACH:** Climb to 3000  
direct CRL VORTAC and hold.

ATIS <b>133.675</b>	DETROIT APP CON <b>124.05 363.2</b> (WEST) <b>125.15 363.2</b> (EAST)	METRO TOWER <b>135.0 287.1</b> (WEST) <b>118.4 287.1</b> (EAST)	GND CON <b>121.8</b> (NW) <b>119.45</b> (NE) <b>123.72</b> (SW) <b>119.25</b> (SE)	CLNC DEL <b>120.65</b>
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## RADAR REQUIRED



CATEGORY	A	B	C	D
S-ILS 22L	** 837/24 200 (200-½)			
S-LOC 22L	1080/24 443 (500-½)	1080/40 443 (500-¾)	1080/50 443 (500-1)	
CIRCLING	1200-1 555 (600-1)	1200-1½ 555 (600-1½)	1200-2 555 (600-2)	



LOC I-EPA <b>110.15</b>	APP CRS <b>275°</b>	Rwy Idg TDZE Apt Elev	<b>8500</b> <b>631</b> <b>646</b>
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## ILS or LOC RWY 27L

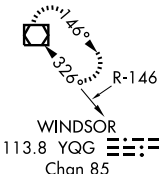
DETROIT METROPOLITAN WAYNE COUNTY (DTW)

**▼** DME from DXO VOR/DME.  
Simultaneous approach authorized with Rwy 27R.  
# RVR 1800 authorized with the use of FD or AP or HUD to DA.



MISSED APPROACH: Climb to 1500  
then climbing left turn to 3000 direct  
CRL VORTAC and hold.

ATIS	DETROIT APP CON	METRO TOWER	GND CON	CLNC DEL
<b>133.675</b>	<b>124.05 363.2</b> (WEST) <b>125.15 363.2</b> (EAST)	<b>135.0 287.1</b> (WEST) <b>118.4 287.1</b> (EAST)	<b>121.8</b> (NW) <b>119.45</b> (NE) <b>123.72</b> (SW) <b>119.25</b> (SE)	<b>120.65</b>

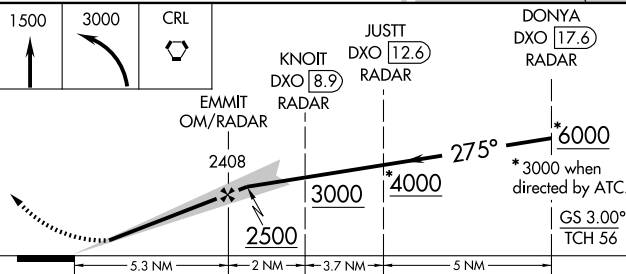
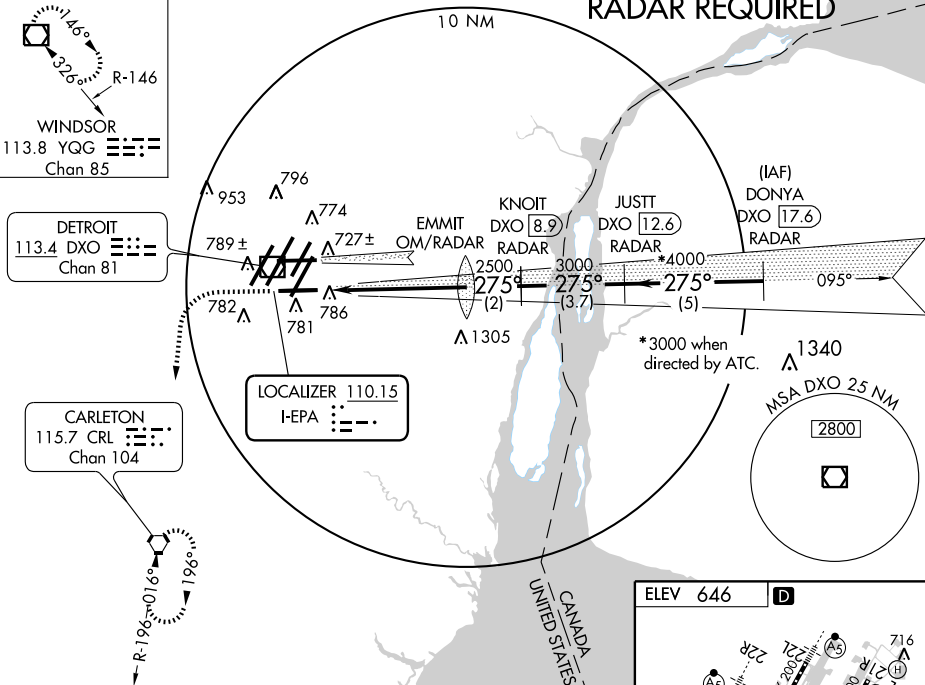
ALTERNATE MISSED  
APCH FIX

DETROIT  
113.4 DXO Chan 81

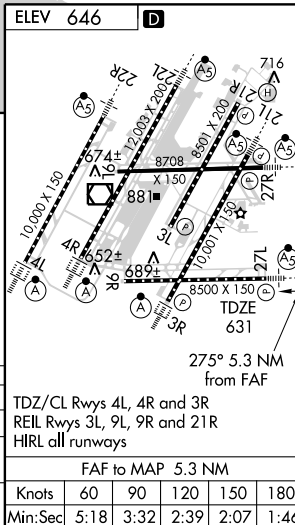
CARLETON  
115.7 CRL Chan 104

LOCALIZER 110.15  
I-EPA

## RADAR REQUIRED



CATEGORY	A	B	C	D
S-ILS 27L	# 831/24 200 (200-½)			
S-LOC 27L	1060/24 429 (500-½)	1060/40 429 (500-¾)	1060/50 429 (500-1)	
CIRCLING	1200-1 554 (600-1)	1200-1½ 554 (600-1½)	1200-2 554 (600-2)	



LOC I-DMI <b>108.5</b>	APP CRS <b>275°</b>	Rwy Idg TDZE Apt Elev	<b>8708</b> <b>635</b> <b>646</b>
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## ILS or LOC RWY 27R

DETROIT METROPOLITAN WAYNE COUNTY (DTW)

**V** DME from DXO VOR/DME. DME or Radar required.  
Simultaneous approach authorized with Rwy 27L.  
# RVR 1800 authorized with the use of FD or AP or HUD to DA.

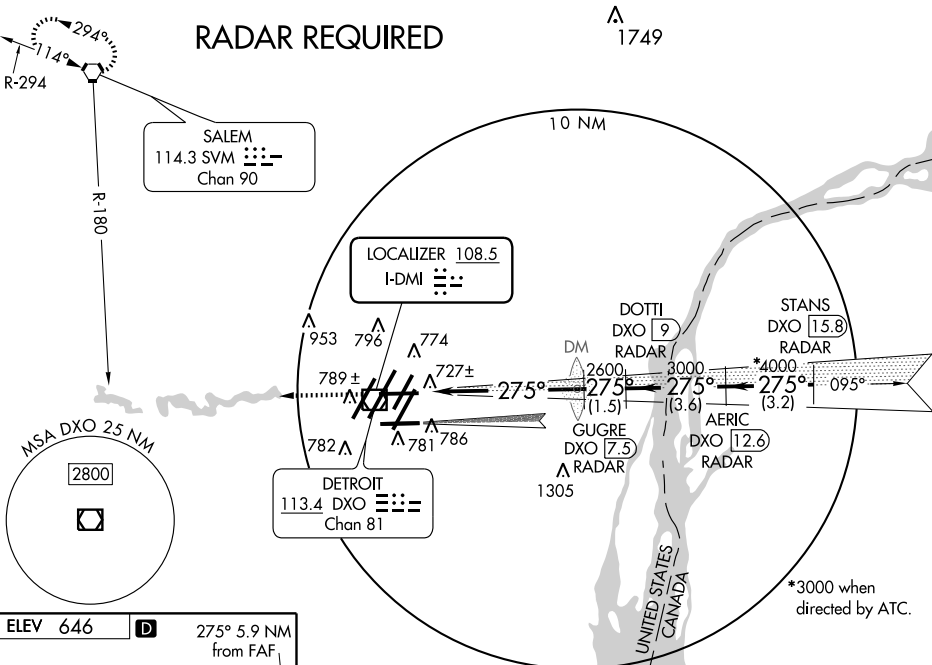
MALSR



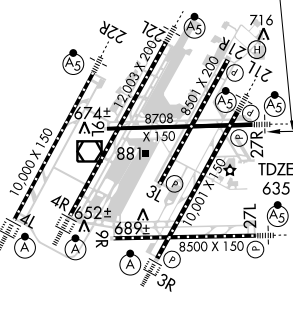
MISSED APPROACH: Climb to 3000 via heading 275° and SVM R-180 to SVM VORTAC and hold.

ATIS <b>133.675</b>	DETROIT APP CON <b>124.05 363.2</b> (WEST) <b>125.15 363.2</b> (EAST)	METRO TOWER <b>135.0 287.1</b> (WEST) <b>118.4 287.1</b> (EAST)	GND CON <b>121.8</b> (NW) <b>119.45</b> (NE) <b>123.72</b> (SW) <b>119.25</b> (SE)	CLNC DEL <b>120.65</b>
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## RADAR REQUIRED



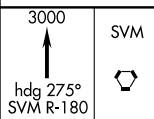
ELEV 646 **D** 275° 5.9 NM from FAF



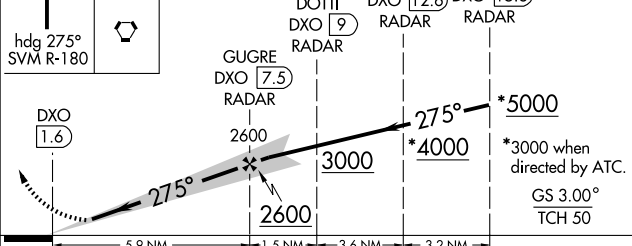
TDZ/CL Rwy 4L, 4R and 3R  
REIL Rwy 3L, 9L, 9R and 21R  
HIRL all runways

FAF to MAP 5.9 NM

Knots	60	90	120	150	180
Min:Sec	5:54	3:56	2:57	2:22	1:58



VGSI and ILS glidepath not coincident.



CATEGORY	A	B	C	D
S-ILS 27R	# 835/24 200 (200-½)			
S-LOC 27R	1060/24	425 (500-½)	1060/40	425 (500-¾)
CIRCLING	1200-1	554 (600-1)	1200-1½ 554 (600-1½)	1200-2 554 (600-2)

DETROIT, MICHIGAN

Amdt 11B 06MAY10

DETROIT METROPOLITAN WAYNE COUNTY (DTW)

42°13'N - 83°21'W

ILS or LOC RWY 27R

LOC/DME I-HUU <b>111.5</b> Chan <b>52</b>	APP CRS <b>035°</b>	Rwy Idg <b>10001</b> TDZE <b>633</b> Apt Elev <b>645</b>
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## (SIMULTANEOUS CLOSE PARALLEL)

DETROIT METROPOLITAN WAYNE COUNTY (DTW)

Simultaneous close parallel approach authorized with ILS PRM Rwy 4R, ILS PRM Rwy 4R (CAT II), ILS PRM Rwy 4R (CAT III) and ILS PRM Rwy 4L. Procedure NA when glideslope not available. Dual VHF comm required. See additional requirements on AAUP. ADF and DME or Radar required.

ALSF-2



MISSED APPROACH: Climb to 1300 then climbing right turn to 3000 direct SPENC LOM and hold.

ATIS  
**133.675**

DETROIT APP CON  
**124.05 363.2 (WEST)**  
**125.15 363.2 (EAST)**

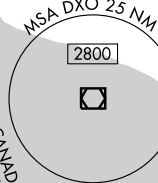
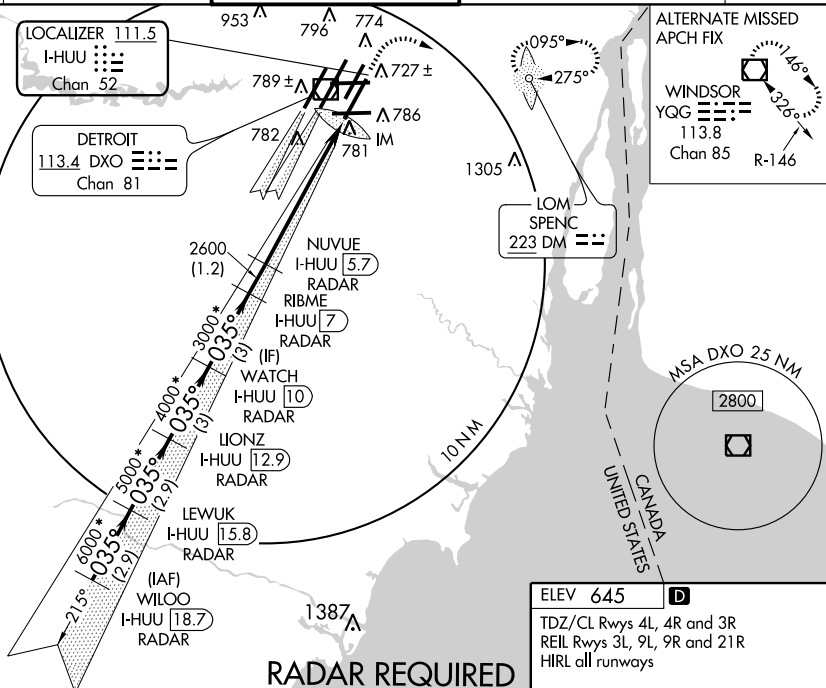
METRO TOWER  
**118.4 287.1**  
**PRM 128.35**

GND CON  
**121.8 (NW) 119.45 (NE)**  
**123.72 (SW) 119.25 (SE)**

CLNC DEL  
**120.65**

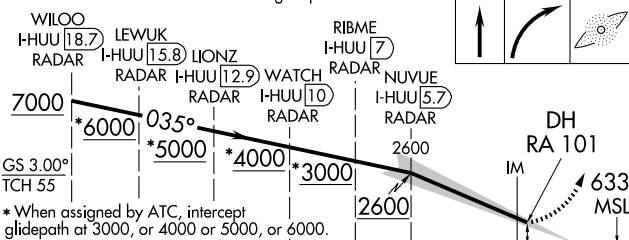
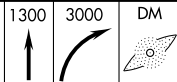
LOCALIZER **111.5**  
I-HUU  
Chan **52**

DETROIT  
**113.4** DXO  
Chan **81**

ELEV **645****D**

TDZ/CL Rwy 4L, 4R and 3R  
REIL Rwy 3L, 9L, 9R and 21R  
HIRL all runways

VGSI and ILS glidepath not coincident.



\* When assigned by ATC, intercept glidepath at 3000, or 4000 or 5000, or 6000.

2.9 NM	2.9 NM	3 NM	3 NM	1.2 NM	5.8 NM	874'	1030'
CATEGORY	A	B	C	D			
S-ILS PRM 3R		733/12	100 RA 101				

**CATEGORY II ILS - SPECIAL AIRCREW  
& AIRCRAFT CERTIFICATION REQUIRED**



**ATTENTION ALL USERS OF ILS PRECISION RUNWAY MONITOR (PRM)**

Condensed Briefing Point:

- When instructed, immediately switch to the tower frequency and select the monitor frequency audio.

1. **ATIS.** When the ATIS broadcast advises that simultaneous ILS/PRM approaches are in progress, pilots should brief to fly the ILS/PRM 3R approach. If later advised to expect an ILS 3R approach, the ILS/PRM 3R chart may be used after completing the following briefing items:

- (a) Minimums and missed approach procedures are unchanged.
- (b) Monitor frequency no longer required.
- (c) A lower glideslope intercept altitude may be assigned when advised to expect ILS 3R approach.

2. **Dual VHF Communication required.** To avoid blocked transmissions, each runway will have two frequencies, a primary and a monitor frequency. The tower controller will transmit on both frequencies. The Monitor controller's transmissions, if needed, will override both frequencies. Pilots will **ONLY** transmit on the tower controller's frequency, but will listen to both frequencies. Select the monitor frequency audio only when instructed by ATC to contact the tower. The volume levels should be set about the same on both radios so that the pilots will be able to hear transmissions on at least one frequency if the other is blocked.

3. **All "Breakouts" are to be hand flown** to assure that the maneuver is accomplished in the shortest amount of time. Pilots, when directed by ATC to break off an approach, must assume that an aircraft is blundering toward their course and a breakout must be initiated immediately.

- (a) ATC Directed "Breakouts:" ATC directed breakouts will consist of a turn and a climb or descent. Pilots must always initiate the breakout in response to an air traffic controller instruction. Controllers will give a descending breakout only when there are no other reasonable options available, but in no case will the descent be below minimum vectoring altitude (MVA) which provides at least 1,000 feet required obstruction clearance. The MVA in the final approach segment is 2400 feet south of Detroit Metropolitan Wayne County Airport.
- (b) Phraseology - "TRAFFIC ALERT:" If an aircraft enters the "NO TRANSGRESSION ZONE (NTZ)," the controller will breakout the threatened aircraft on the adjacent approach. The phraseology for the breakout will be:

"TRAFFIC ALERT, (aircraft call sign) TURN (left/right) IMMEDIATELY,  
HEADING (degrees), CLIMB/DESCEND AND MAINTAIN (altitude)".

4. **ILS Navigation:** Descending on the ILS glideslope ensures complying with any charted crossing restrictions.

Special pilot training required. Pilots who are unable to participate, or dispatchers on their behalf, must contact the FAA Command Center prior to departure (1-800-333-4286 or 703-904-4452) to obtain an arrival reservation. Non-participating pilots enroute to DTW as an alternate, or trained pilots that are unexpectedly unable to participate due to in-flight circumstances will be afforded appropriate arrival services as operational conditions permit. Non-participating pilots shall notify the Cleveland ARTCC as soon as practical, but at least 100 miles from DTW.

LOC/DME I-HUU <b>111.5</b> Chan <b>52</b>	APP CRS <b>035°</b>	Rwy Idg TDZE <b>633</b> Apt Elev <b>645</b>	<b>10001</b>
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## (SIMULTANEOUS CLOSE PARALLEL)

DETROIT METROPOLITAN WAYNE COUNTY (DTW)



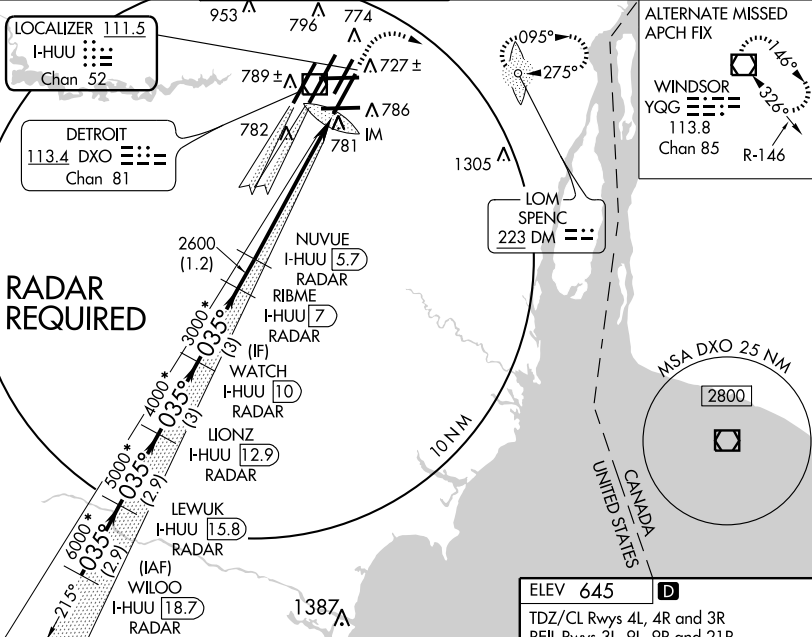
Simultaneous close parallel approach authorized with ILS PRM Rwy 4R, ILS PRM Rwy 4R (CAT II), ILS PRM Rwy 4R (CAT III) and ILS PRM Rwy 4L. Procedure NA when glideslope not available. Dual VHF comm required. See additional requirements on AAUP. ADF and DME or Radar required.

ALSF-2



MISSED APPROACH: Climb to 1300 then climbing right turn to 3000 direct SPENC LOM and hold.

ATIS <b>133.675</b>	DETROIT APP CON <b>124.05 363.2 (WEST)</b> <b>125.15 363.2 (EAST)</b>	METRO TOWER <b>118.4 287.1</b> <b>PRM 128.35</b>	GND CON <b>121.8 (NW)</b> <b>119.45 (NE)</b> <b>123.72 (SW)</b> <b>119.25 (SE)</b>	CLNC DEL <b>120.65</b>
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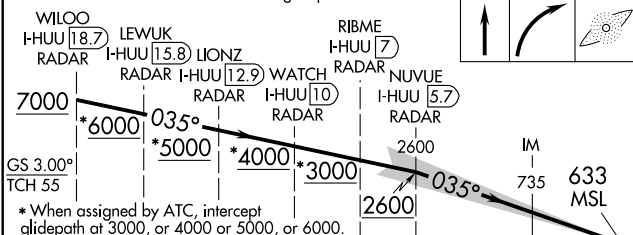


ELEV 645

D

TDZ/CL Rws 4L, 4R and 3R  
REIL Rws 3L, 9L, 9R and 21R  
HRL all runways

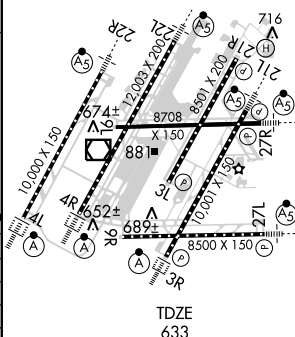
VGSI and ILS glidepath not coincident.



\* When assigned by ATC, intercept glidepath at 3000, or 4000 or 5000, or 6000.

CATEGORY	A	B	C	D
S-ILS PRM 3R		CAT IIIa	RVR 07	
S-ILS PRM 3R		CAT IIIb	RVR 06	
S-ILS PRM 3R		CAT IIIc	NA	

**CATEGORY III ILS - SPECIAL AIRCREW  
& AIRCRAFT CERTIFICATION REQUIRED**



**ATTENTION ALL USERS OF ILS PRECISION RUNWAY MONITOR (PRM)**

Condensed Briefing Point:

- When instructed, immediately switch to the tower frequency and select the monitor frequency audio.

1. **ATIS.** When the ATIS broadcast advises that simultaneous ILS/PRM approaches are in progress, pilots should brief to fly the ILS/PRM 3R approach. If later advised to expect an ILS 3R approach, the ILS/PRM 3R chart may be used after completing the following briefing items:

- (a) Minimums and missed approach procedures are unchanged.
- (b) Monitor frequency no longer required.
- (c) A lower glideslope intercept altitude may be assigned when advised to expect ILS 3R approach.

2. **Dual VHF Communication required.** To avoid blocked transmissions, each runway will have two frequencies, a primary and a monitor frequency. The tower controller will transmit on both frequencies. The Monitor controller's transmissions, if needed, will override both frequencies. Pilots will **ONLY** transmit on the tower controller's frequency, but will listen to both frequencies. Select the monitor frequency audio only when instructed by ATC to contact the tower. The volume levels should be set about the same on both radios so that the pilots will be able to hear transmissions on at least one frequency if the other is blocked.

3. **All "Breakouts" are to be hand flown** to assure that the maneuver is accomplished in the shortest amount of time. Pilots, when directed by ATC to break off an approach, must assume that an aircraft is blundering toward their course and a breakout must be initiated immediately.

- (a) ATC Directed "Breakouts:" ATC directed breakouts will consist of a turn and a climb or descent. Pilots must always initiate the breakout in response to an air traffic controller instruction. Controllers will give a descending breakout only when there are no other reasonable options available, but in no case will the descent be below minimum vectoring altitude (MVA) which provides at least 1,000 feet required obstruction clearance. The MVA in the final approach segment is 2400 feet south of Detroit Metropolitan Wayne County Airport.
- (b) Phraseology - "TRAFFIC ALERT:" If an aircraft enters the "NO TRANSGRESSION ZONE (NTZ)," the controller will breakout the threatened aircraft on the adjacent approach. The phraseology for the breakout will be:

"TRAFFIC ALERT, (aircraft call sign) TURN (left/right) IMMEDIATELY,  
HEADING (degrees), CLIMB/DESCEND AND MAINTAIN (altitude)".

4. **ILS Navigation:** Descending on the ILS glideslope ensures complying with any charted crossing restrictions.

Special pilot training required. Pilots who are unable to participate, or dispatchers on their behalf, must contact the FAA Command Center prior to departure (1-800-333-4286 or 703-904-4452) to obtain an arrival reservation. Non-participating pilots enroute to DTW as an alternate, or trained pilots that are unexpectedly unable to participate due to in-flight circumstances will be afforded appropriate arrival services as operational conditions permit. Non-participating pilots shall notify the Cleveland ARTCC as soon as practical, but at least 100 miles from DTW.

LOC/DME I-HUU <b>111.5</b> Chan <b>52</b>	APP CRS <b>035°</b>	Rwy Idg TDZE <b>633</b> Apt Elev <b>645</b>
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# (SIMULTANEOUS CLOSE PARALLEL)

DETROIT METROPOLITAN WAYNE COUNTY (DTW)

**Simultaneous close parallel approach authorized with ILS PRM Rwy 4R, ILS PRM Rwy 4R (CAT II), ILS PRM Rwy 4R (CAT III) and ILS PRM Rwy 4L. Procedure NA when glideslope not available. Dual VHF comm required. See additional requirements on AAUP. ADF and DME or Radar required.**

ALSF-2



**MISSED APPROACH:** Climb to 1300 then climbing right turn to 3000 direct SPENC LOM and hold.

ATIS  
**133.675**

DETROIT APP CON  
**124.05 363.2 (WEST)**  
**125.15 363.2 (EAST)**

METRO TOWER  
**118.4 287.1**  
**PRM 128.35**

GND CON  
**121.8 (NW)** **119.45 (NE)**  
**123.72 (SW)** **119.25 (SE)**

CLNC DEL  
**120.65**

LOCALIZER **111.5**  
I-HUU  
Chan **52**

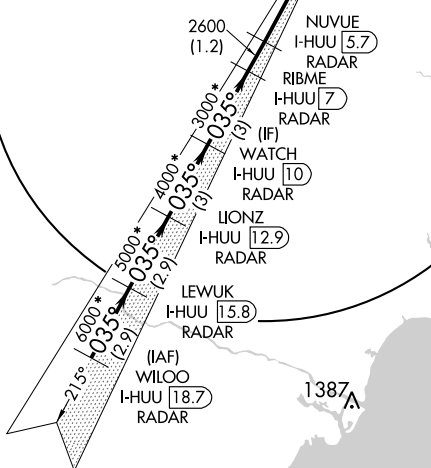
DETROIT  
**113.4 DXO**  
Chan **81**

953  
796  
789 ±  
782  
781  
774  
727 ±  
786  
IM

1305  
LOM  
SPENC  
223 DM

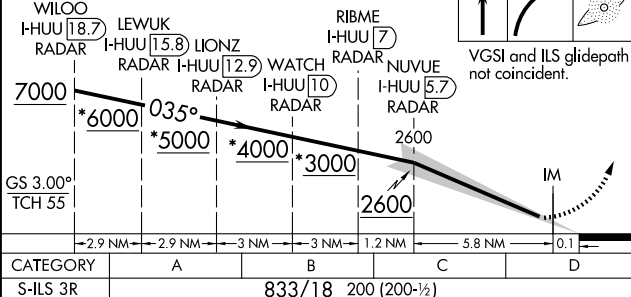
ALTERNATE MISSED  
APCH FIX

WINDSOR  
YQG  
113.8  
Chan 85  
R-146



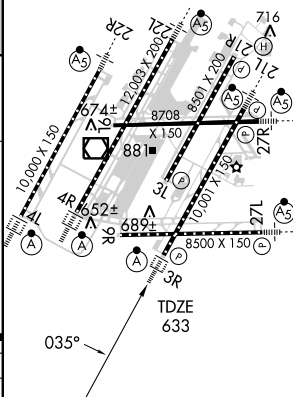
## RADAR REQUIRED

\* When assigned by ATC, intercept glidepath at 3000, or 4000 or 5000, or 6000.



1300 3000 DM  
VGSI and ILS glidepath not coincident.

ELEV **645**  
TDZ/CL Rwy 4L, 4R and 3R  
REIL Rwy 3L, 9L, 9R and 21R  
HIRL all runways



**ATTENTION ALL USERS OF ILS PRECISION RUNWAY MONITOR (PRM)**

## Condensed Briefing Point:

- When instructed, immediately switch to the tower frequency and select the monitor frequency audio.

1. **ATIS.** When the ATIS broadcast advises that simultaneous ILS/PRM approaches are in progress, pilots should brief to fly the ILS/PRM 3R approach. If later advised to expect an ILS 3R approach, the ILS/PRM 3R chart may be used after completing the following briefing items:

- (a) Minimums and missed approach procedures are unchanged.
- (b) Monitor frequency no longer required.
- (c) A lower glideslope intercept altitude may be assigned when advised to expect ILS 3R approach.

2. **Dual VHF Communication required.** To avoid blocked transmissions, each runway will have two frequencies, a primary and a monitor frequency. The tower controller will transmit on both frequencies. The Monitor controller's transmissions, if needed, will override both frequencies. Pilots will **ONLY** transmit on the tower controller's frequency, but will listen to both frequencies. Select the monitor frequency audio only when instructed by ATC to contact the tower. The volume levels should be set about the same on both radios so that the pilots will be able to hear transmissions on at least one frequency if the other is blocked.

3. **All "Breakouts" are to be hand flown** to assure that the maneuver is accomplished in the shortest amount of time. Pilots, when directed by ATC to break off an approach, must assume that an aircraft is blundering toward their course and a breakout must be initiated immediately.

- (a) ATC Directed "Breakouts:" ATC directed breakouts will consist of a turn and a climb or descent. Pilots must always initiate the breakout in response to an air traffic controller instruction. Controllers will give a descending breakout only when there are no other reasonable options available, but in no case will the descent be below minimum vectoring altitude (MVA) which provides at least 1,000 feet required obstruction clearance. The MVA in the final approach segment is 2400 feet south of Detroit Metropolitan Wayne County Airport.
- (b) Phraseology - "TRAFFIC ALERT:" If an aircraft enters the "NO TRANSGRESSION ZONE (NTZ)," the controller will breakout the threatened aircraft on the adjacent approach. The phraseology for the breakout will be:

"TRAFFIC ALERT, (aircraft call sign) TURN (left/right) IMMEDIATELY,  
HEADING (degrees), CLIMB/DESCEND AND MAINTAIN (altitude)".

4. **ILS Navigation:** Descending on the ILS glideslope ensures complying with any charted crossing restrictions.

Special pilot training required. Pilots who are unable to participate, or dispatchers on their behalf, must contact the FAA Command Center prior to departure (1-800-333-4286 or 703-904-4452) to obtain an arrival reservation. Non-participating pilots enroute to DTW as an alternate, or trained pilots that are unexpectedly unable to participate due to in-flight circumstances will be afforded appropriate arrival services as operational conditions permit. Non-participating pilots shall notify the Cleveland ARTCC as soon as practical, but at least 100 miles from DTW.

DETROIT, MICHIGAN

AL-119 (FAA)

ILS PRM RWY 4R (CAT II)

LOC/DME I-DTW  
**110.7**  
Chan **44**

APP CRS  
**035°**

Rwy Idg **12003**  
TDZE **638**  
Apt Elev **645**

(SIMULTANEOUS CLOSE PARALLEL)  
DETROIT METROPOLITAN WAYNE COUNTY (DTW)



Simultaneous close parallel approach authorized with ILS PRM Rwy 4L and ILS PRM Rwy 3R, ILS PRM Rwy 3R (CAT II), ILS PRM Rwy 3R (CAT III). Procedure not authorized when glideslope not available. Dual VHF Comm required. See additional requirements on AAUP.

ALSIF-2



MISSED APPROACH: Climb to 3000 then right turn direct MADDS LOM and hold.

ATIS  
**133.675**

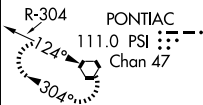
DETROIT APP CON  
**124.05 363.2** (WEST)  
**125.15 363.2** (EAST)

METRO TOWER  
**135.0 287.1**  
**PRM 135.775**

GND CON  
**121.8** (NW) **119.45** (NE)  
**123.72** (SW) **119.25** (SE)

CLNC DEL  
**120.65**

ALTERNATE MISSED  
APCH FIX



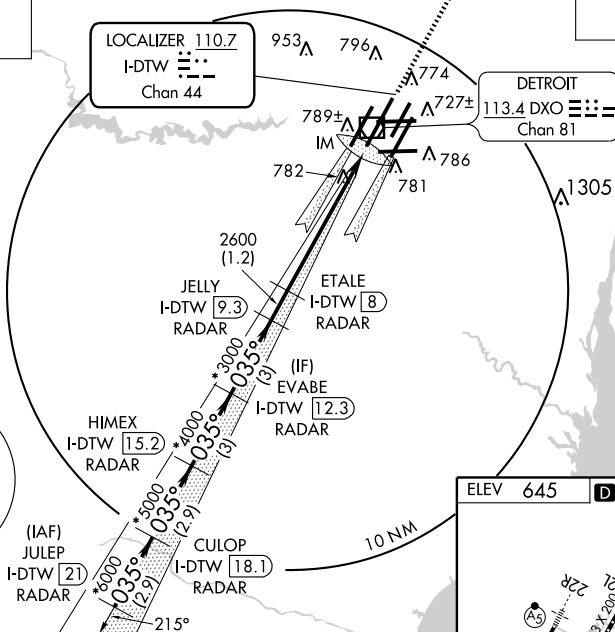
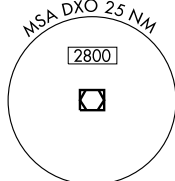
ADF and DME or RADAR  
REQUIRED

MISSED APCH FIX

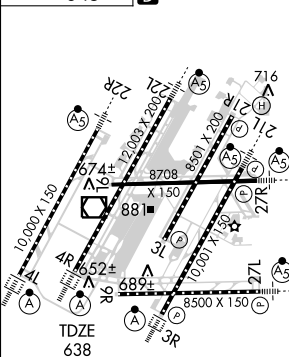


LOCALIZER **110.7**  
I-DTW  
Chan **44**

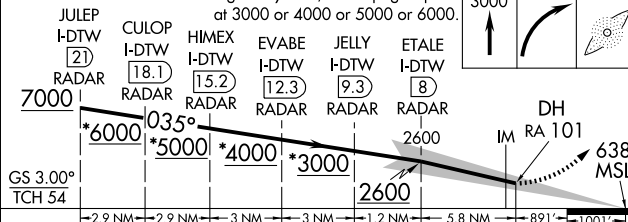
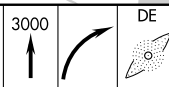
DETROIT  
**113.4 DXO**  
Chan **81**



ELEV **645** **D**



\*When assigned by ATC, intercept glidepath at 3000 or 4000 or 5000 or 6000.



CATEGORY	A	B	C	D
S-ILS 4R	738/12	100 RA 101		

**CATEGORY II ILS - SPECIAL AIRCREW  
& AIRCRAFT CERTIFICATION REQUIRED**

TDZ/CL Rwy 4L, 4R and 3R  
REIL Rwy 3L, 9L, 9R and 21R  
HIRL all runways

DETROIT, MICHIGAN

42°13'N - 83°21'W

DETROIT METROPOLITAN WAYNE COUNTY (DTW)

Orig 10266

ILS PRM RWY 4R (CAT II) (SIMULTANEOUS CLOSE PARALLEL)

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010

**ATTENTION ALL USERS OF ILS PRECISION RUNWAY MONITOR (PRM)**

## Condensed Briefing Point:

- When instructed, immediately switch to the tower frequency and select the monitor frequency audio.

1. **ATIS.** When the ATIS broadcast advises that simultaneous ILS/PRM approaches are in progress, pilots should brief to fly the ILS/PRM 4R approach. If later advised to expect an ILS 4R approach, the ILS/PRM 4R chart may be used after completing the following briefing items:

- (a) Minimums and missed approach procedures are unchanged.
- (b) Monitor frequency no longer required.
- (c) A lower glideslope intercept altitude may be assigned when advised to expect ILS 4R approach.

2. **Dual VHF Communication required.** To avoid blocked transmissions, each runway will have two frequencies, a primary and a monitor frequency. The tower controller will transmit on both frequencies. The Monitor controller's transmissions, if needed, will override both frequencies. Pilots will **ONLY** transmit on the tower controller's frequency, but will listen to both frequencies. Select the monitor frequency audio only when instructed by ATC to contact the tower. The volume levels should be set about the same on both radios so that the pilots will be able to hear transmissions on at least one frequency if the other is blocked.

3. **All "Breakouts" are to be hand flown** to assure that the maneuver is accomplished in the shortest amount of time. Pilots, when directed by ATC to break off an approach, must assume that an aircraft is blundering toward their course and a breakout must be initiated immediately.

- (a) ATC Directed "Breakouts:" ATC directed breakouts will consist of a turn and a climb or descent. Pilots must always initiate the breakout in response to an air traffic controller instruction. Controllers will give a descending breakout only when there are no other reasonable options available, but in no case will the descent be below minimum vectoring altitude (MVA) which provides at least 1,000 feet required obstruction clearance. The MVA in the final approach segment is 2400 feet south of Detroit Metropolitan Wayne County Airport.

- (b) Phraseology - "TRAFFIC ALERT:" If an aircraft enters the "NO TRANSGRESSION ZONE (NTZ)," the controller will breakout the threatened aircraft on the adjacent approach. The phraseology for the breakout will be:

"TRAFFIC ALERT, (aircraft call sign) TURN (left/right) IMMEDIATELY,  
HEADING (degrees), CLIMB/DESCEND AND MAINTAIN (altitude)".

4. **ILS Navigation:** Descending on the ILS glideslope ensures complying with any charted crossing restrictions.

Special pilot training required. Pilots who are unable to participate, or dispatchers on their behalf, must contact the FAA Command Center prior to departure (1-800-333-4286 or 703-904-4452) to obtain an arrival reservation. Non-participating pilots enroute to DTW as an alternate, or trained pilots that are unexpectedly unable to participate due to in-flight circumstances will be afforded appropriate arrival services as operational conditions permit. Non-participating pilots shall notify the Cleveland ARTCC as soon as practical, but at least 100 miles from DTW.

LOC/DME I-DTW <b>110.7</b> Chan <b>44</b>	APP CRS <b>035°</b>	Rwy Idg TDZE Apt Elev	<b>12003</b> <b>638</b> <b>645</b>
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# (SIMULTANEOUS CLOSE PARALLEL)

DETROIT METROPOLITAN WAYNE COUNTY (DTW)



Simultaneous close parallel approach authorized with ILS PRM Rwy 4L and ILS PRM Rwy 3R, ILS PRM Rwy 3R (CAT II), ILS PRM Rwy 3R (CAT III). Procedure not authorized when glideslope not available. Dual VHF Comm required. See additional requirements on AAUP.

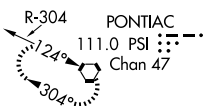
ALSIF-2



MISSED APPROACH: Climb to 3000 then right turn direct MADDS LOM and hold.

ATIS <b>133.675</b>	DETROIT APP CON <b>124.05 363.2</b> (WEST) <b>125.15 363.2</b> (EAST)	METRO TOWER <b>135.0 287.1</b> <b>PRM 135.775</b>	GND CON <b>121.8</b> (NW) <b>119.45</b> (NE) <b>123.72</b> (SW) <b>119.25</b> (SE)	CLNC DEL <b>120.65</b>
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ALTERNATE MISSED  
APCH FIX



LOCALIZER 110.7  
I-DTW  
Chan 44

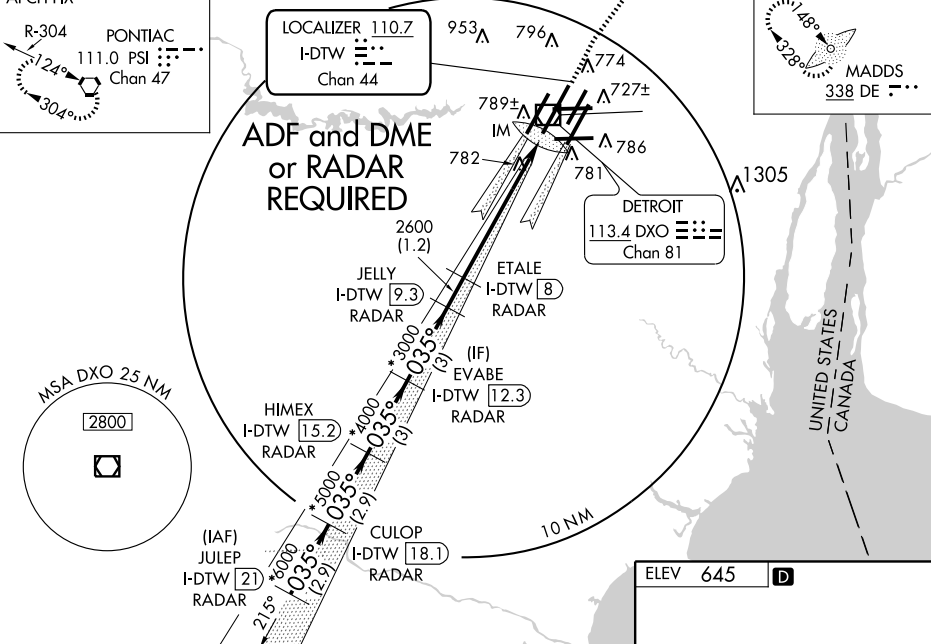
MISSED APCH FIX



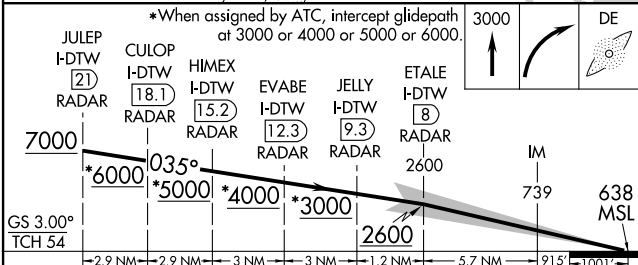
ADF and DME  
or RADAR  
REQUIRED

MSA DXO 25 NM

2800

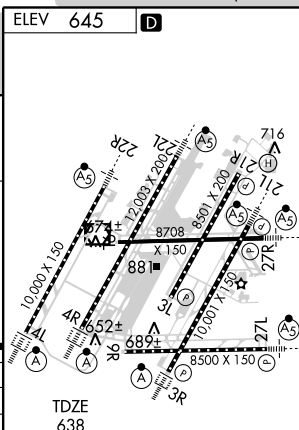


\*When assigned by ATC, intercept glidepath at 3000 or 4000 or 5000 or 6000.



CATEGORY	A	B	C	D
S-ILS 4R		CAT IIIa	RVR 700	
S-ILS 4R		CAT IIIb	RVR 600	
S-ILS 4R		CAT IIIc	NA	

**CATEGORY III ILS - SPECIAL AIRCREW  
& AIRCRAFT CERTIFICATION REQUIRED**



TDZ/CL Rwy 4L, 4R and 3R  
REIL Rwy 3L, 9L, 9R and 21R  
HIRL all runways



**ATTENTION ALL USERS OF ILS PRECISION RUNWAY MONITOR (PRM)**

## Condensed Briefing Point:

- When instructed, immediately switch to the tower frequency and select the monitor frequency audio.

1. **ATIS.** When the ATIS broadcast advises that simultaneous ILS/PRM approaches are in progress, pilots should brief to fly the ILS/PRM 4R approach. If later advised to expect an ILS 4R approach, the ILS/PRM 4R chart may be used after completing the following briefing items:

- (a) Minimums and missed approach procedures are unchanged.
- (b) Monitor frequency no longer required.
- (c) A lower glideslope intercept altitude may be assigned when advised to expect ILS 4R approach.

2. **Dual VHF Communication required.** To avoid blocked transmissions, each runway will have two frequencies, a primary and a monitor frequency. The tower controller will transmit on both frequencies. The Monitor controller's transmissions, if needed, will override both frequencies. Pilots will **ONLY** transmit on the tower controller's frequency, but will listen to both frequencies. Select the monitor frequency audio only when instructed by ATC to contact the tower. The volume levels should be set about the same on both radios so that the pilots will be able to hear transmissions on at least one frequency if the other is blocked.

3. **All "Breakouts" are to be hand flown** to assure that the maneuver is accomplished in the shortest amount of time. Pilots, when directed by ATC to break off an approach, must assume that an aircraft is blundering toward their course and a breakout must be initiated immediately.

- (a) ATC Directed "Breakouts:" ATC directed breakouts will consist of a turn and a climb or descent. Pilots must always initiate the breakout in response to an air traffic controller instruction. Controllers will give a descending breakout only when there are no other reasonable options available, but in no case will the descent be below minimum vectoring altitude (MVA) which provides at least 1,000 feet required obstruction clearance. The MVA in the final approach segment is 2400 feet south of Detroit Metropolitan Wayne County Airport.
- (b) Phraseology - "TRAFFIC ALERT:" If an aircraft enters the "NO TRANSGRESSION ZONE (NTZ)," the controller will breakout the threatened aircraft on the adjacent approach. The phraseology for the breakout will be:

"TRAFFIC ALERT, (aircraft call sign) TURN (left/right) IMMEDIATELY,  
HEADING (degrees), CLIMB/DESCEND AND MAINTAIN (altitude)".

4. **ILS Navigation:** Descending on the ILS glideslope ensures complying with any charted crossing restrictions.

Special pilot training required. Pilots who are unable to participate, or dispatchers on their behalf, must contact the FAA Command Center prior to departure (1-800-333-4286 or 703-904-4452) to obtain an arrival reservation. Non-participating pilots enroute to DTW as an alternate, or trained pilots that are unexpectedly unable to participate due to in-flight circumstances will be afforded appropriate arrival services as operational conditions permit. Non-participating pilots shall notify the Cleveland ARTCC as soon as practical, but at least 100 miles from DTW.

DETROIT, MICHIGAN

AL-119 (FAA)

ILS PRM RWY 4R

LOC/DME I-DTW  
**110.7**  
Chan **44**

APP CRS  
**035°**

Rwy Idg **12003**  
TDZE **638**  
Apt Elev **645**

(SIMULTANEOUS CLOSE PARALLEL)  
DETROIT METROPOLITAN WAYNE COUNTY (DTW)



Simultaneous close parallel approach authorized with ILS PRM Rwy 4L and ILS PRM Rwy 3R, ILS PRM Rwy 3R (CAT II), ILS PRM Rwy 3R (CAT III). Procedure not authorized when glideslope not available. Dual VHF Comm required. See additional requirements on AAPP.

ALSF-2



MISSED APPROACH: Climb to 3000 then right turn direct MADDS LOM and hold.

ATIS  
**133.675**

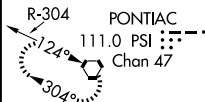
DETROIT APP CON  
**124.05 363.2** (WEST)  
**125.15 363.2** (EAST)

METRO TOWER  
**135.0 287.1**  
**PRM 135.775**

GND CON  
**121.8** (NW) **119.45** (NE)  
**123.72** (SW) **119.25** (SE)

CLNC DEL  
**120.65**

ALTERNATE MISSED  
APCH FIX



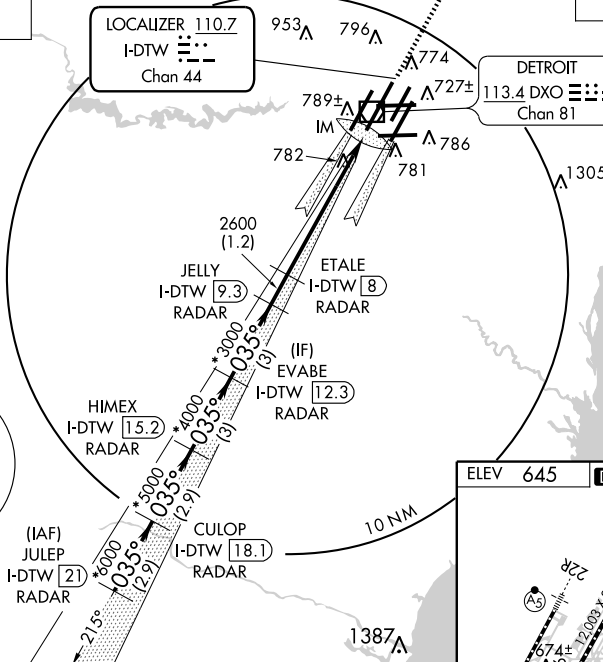
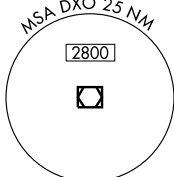
ADF and DME or RADAR  
REQUIRED

MISSED APCH FIX

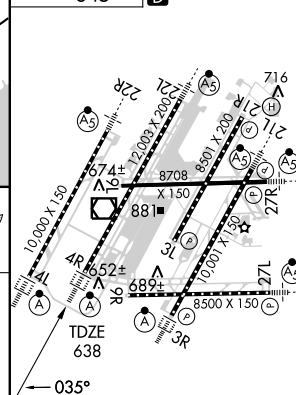


LOCALIZER **110.7**  
I-DTW  
Chan **44**

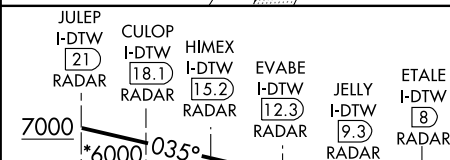
DETROIT  
**113.4 DXO**  
Chan **81**



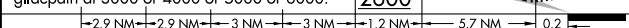
ELEV **645** **D**



TDZ/CL Rwy 4L, 4R and 3R  
REIL Rwy 3L, 9L, 9R and 21R  
HIRL all runways



\*When assigned by ATC, intercept glidepath at 3000 or 4000 or 5000 or 6000.



CATEGORY	A	B	C	D
S-ILS 4R		838/18	200 (200-1/2)	

DETROIT, MICHIGAN  
Orig 10266

42°13'N - 83°21'W

DETROIT METROPOLITAN WAYNE COUNTY (DTW)

ILS PRM RWY 4R (SIMULTANEOUS CLOSE PARALLEL)

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010

**ATTENTION ALL USERS OF ILS PRECISION RUNWAY MONITOR (PRM)**

## Condensed Briefing Point:

- When instructed, immediately switch to the tower frequency and select the monitor frequency audio.

1. **ATIS.** When the ATIS broadcast advises that simultaneous ILS/PRM approaches are in progress, pilots should brief to fly the ILS/PRM 4R approach. If later advised to expect an ILS 4R approach, the ILS/PRM 4R chart may be used after completing the following briefing items:

- (a) Minimums and missed approach procedures are unchanged.
- (b) Monitor frequency no longer required.
- (c) A lower glideslope intercept altitude may be assigned when advised to expect ILS 4R approach.

2. **Dual VHF Communication required.** To avoid blocked transmissions, each runway will have two frequencies, a primary and a monitor frequency. The tower controller will transmit on both frequencies. The Monitor controller's transmissions, if needed, will override both frequencies. Pilots will **ONLY** transmit on the tower controller's frequency, but will listen to both frequencies. Select the monitor frequency audio only when instructed by ATC to contact the tower. The volume levels should be set about the same on both radios so that the pilots will be able to hear transmissions on at least one frequency if the other is blocked.

3. **All "Breakouts" are to be hand flown** to assure that the maneuver is accomplished in the shortest amount of time. Pilots, when directed by ATC to break off an approach, must assume that an aircraft is blundering toward their course and a breakout must be initiated immediately.

- (a) ATC Directed "Breakouts:" ATC directed breakouts will consist of a turn and a climb or descent. Pilots must always initiate the breakout in response to an air traffic controller instruction. Controllers will give a descending breakout only when there are no other reasonable options available, but in no case will the descent be below minimum vectoring altitude (MVA) which provides at least 1,000 feet required obstruction clearance. The MVA in the final approach segment is 2400 feet south of Detroit Metropolitan Wayne County Airport.
- (b) Phraseology - "TRAFFIC ALERT:" If an aircraft enters the "NO TRANSGRESSION ZONE (NTZ)," the controller will breakout the threatened aircraft on the adjacent approach. The phraseology for the breakout will be:

"TRAFFIC ALERT, (aircraft call sign) TURN (left/right) IMMEDIATELY,  
HEADING (degrees), CLIMB/DESCEND AND MAINTAIN (altitude)".

4. **ILS Navigation:** Descending on the ILS glideslope ensures complying with any charted crossing restrictions.

Special pilot training required. Pilots who are unable to participate, or dispatchers on their behalf, must contact the FAA Command Center prior to departure (1-800-333-4286 or 703-904-4452) to obtain an arrival reservation. Non-participating pilots enroute to DTW as an alternate, or trained pilots that are unexpectedly unable to participate due to in-flight circumstances will be afforded appropriate arrival services as operational conditions permit. Non-participating pilots shall notify the Cleveland ARTCC as soon as practical, but at least 100 miles from DTW.

LOC/DME I-EJR <b>111.5</b> Chan <b>52</b>	APP CRS <b>215°</b>	Rwy Idg <b>10001</b> TDZE <b>632</b> Apt Elev <b>645</b>
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(SIMULTANEOUS CLOSE PARALLEL)

DETROIT METROPOLITAN WAYNE COUNTY (DTW)



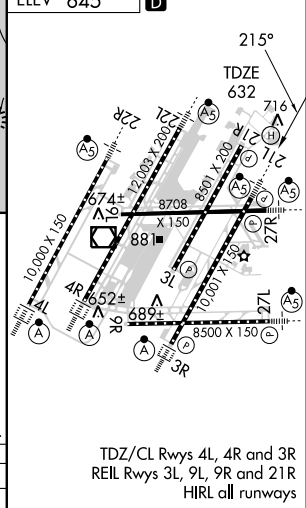
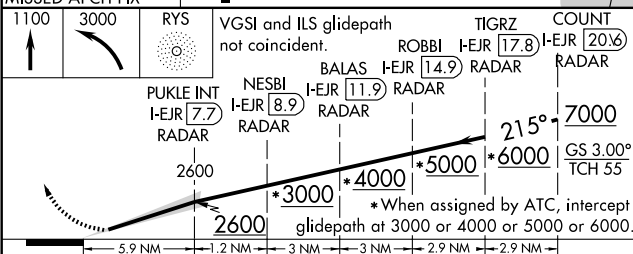
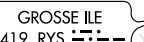
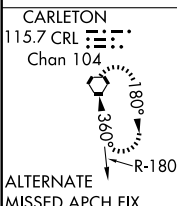
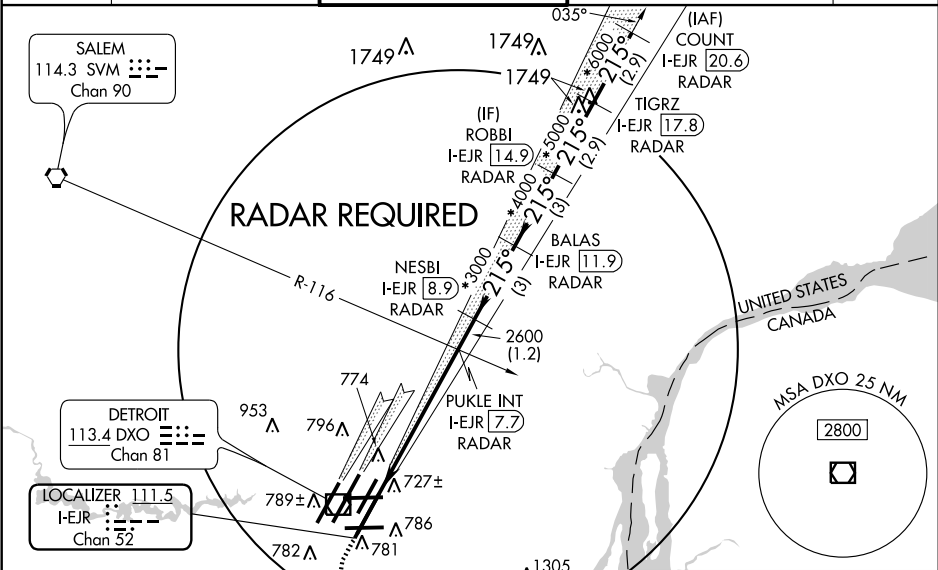
Simultaneous close parallel approach authorized with ILS PRM  
Rwy 22L and ILS PRM Rwy 22R.  
Procedure NA when glideslope not available.  
ADF and RADAR or DME Required.  
Dual VHF Comm Required. See additional requirements on AAUP.  
\*\* RVR 1800 authorized with the use of FD or HUD to DA.

MALSR



**MISSED APPROACH:** Climb to 1100 then climbing left turn to 3000 direct RYS NDB and hold.

ATIS <b>133.675</b>	DETROIT APP CON		METRO TOWER		GND CON		CLNC DEL <b>120.65</b>
	<b>124.05</b>	<b>363.2</b> (WEST)	<b>118.4</b>	<b>287.1</b>	<b>121.8</b> (NW)	<b>119.45</b> (NE)	
	<b>125.15</b>	<b>363.2</b> (EAST)	<b>PRM</b>	<b>128.35</b>	<b>123.72</b> (SW)	<b>119.25</b> (SE)	



CATEGORY	A	B	C	D
S-ILS 21L	**832/24 200 (200-1/2)			

**ATTENTION ALL USERS OF ILS PRECISION RUNWAY MONITOR (PRM)**

## Condensed Briefing Point:

- When instructed, immediately switch to the tower frequency and select the monitor frequency audio.

1. **ATIS.** When the ATIS broadcast advises that simultaneous ILS/PRM approaches are in progress, pilots should brief to fly the ILS/PRM 21L approach. If later advised to expect an ILS 21L approach, the ILS/PRM 21L chart may be used after completing the following briefing items:

- (a) Minimums and missed approach procedures are unchanged.
- (b) Monitor frequency no longer required.
- (c) A lower glideslope intercept altitude may be assigned when advised to expect ILS 21L approach.

2. **Dual VHF Communication required.** To avoid blocked transmissions, each runway will have two frequencies, a primary and a monitor frequency. The tower controller will transmit on both frequencies. The Monitor controller's transmissions, if needed, will override both frequencies. Pilots will **ONLY** transmit on the tower controller's frequency, but will listen to both frequencies. Select the monitor frequency audio only when instructed by ATC to contact the tower. The volume levels should be set about the same on both radios so that the pilots will be able to hear transmissions on at least one frequency if the other is blocked.

3. **All "Breakouts" are to be hand flown** to assure that the maneuver is accomplished in the shortest amount of time. Pilots, when directed by ATC to break off an approach, must assume that an aircraft is blundering toward their course and a breakout must be initiated immediately.

- (a) ATC Directed "Breakouts:" ATC directed breakouts will consist of a turn and a climb or descent. Pilots must always initiate the breakout in response to an air traffic controller instruction. Controllers will give a descending breakout only when there are no other reasonable options available, but in no case will the descent be below minimum vectoring altitude (MVA) which provides at least 1,000 feet required obstruction clearance. The MVA in the final approach segment is 2800 feet north of Detroit Metropolitan Wayne County Airport.

- (b) Phraseology - "TRAFFIC ALERT:" If an aircraft enters the "NO TRANSGRESSION ZONE (NTZ)", the controller will breakout the threatened aircraft on the adjacent approach. The phraseology for the breakout will be:

"TRAFFIC ALERT, (aircraft call sign) TURN (left/right) IMMEDIATELY,  
HEADING (degrees), CLIMB/DESCEND AND MAINTAIN (altitude)".

4. **ILS Navigation:** Descending on the ILS glideslope ensures complying with any charted crossing restrictions.

Special pilot training required. Pilots who are unable to participate, or dispatchers on their behalf, must contact the FAA Command Center prior to departure (1-800-333-4286 or 703-904-4452) to obtain an arrival reservation. Non-participating pilots enroute to DTW as an alternate, or trained pilots that are unexpectedly unable to participate due to in-flight circumstances will be afforded appropriate arrival services as operational conditions permit. Non-participating pilots shall notify the Cleveland ARTCC as soon as practical, but at least 100 miles from DTW.

LOC/DME I-DWC  
**110.7**  
Chan **44**

APP CRS  
**215°**

Rwy Idg **12003**  
TDZE **637**  
Apt Elev **645**

(SIMULTANEOUS CLOSE PARALLEL)  
DETROIT METROPOLITAN WAYNE COUNTY (DTW)

**▼** RADAR or DME Required. Simultaneous close parallel approach authorized with ILS PRM Rwy 21L and ILS PRM Rwy 22R. Procedure NA when glideslope not available. Dual VHF Comm Required. See additional requirements on AAUP.  
\*\* RVR 1800 authorized with the use of FD or AP or HUD to DA.

MALSR  


MISSED APPROACH:  
Climb to 3000 direct  
CRL VORTAC and hold.

ATIS  
**133.675**

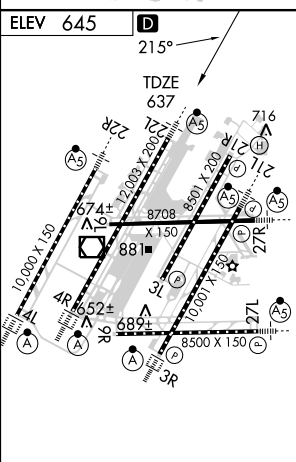
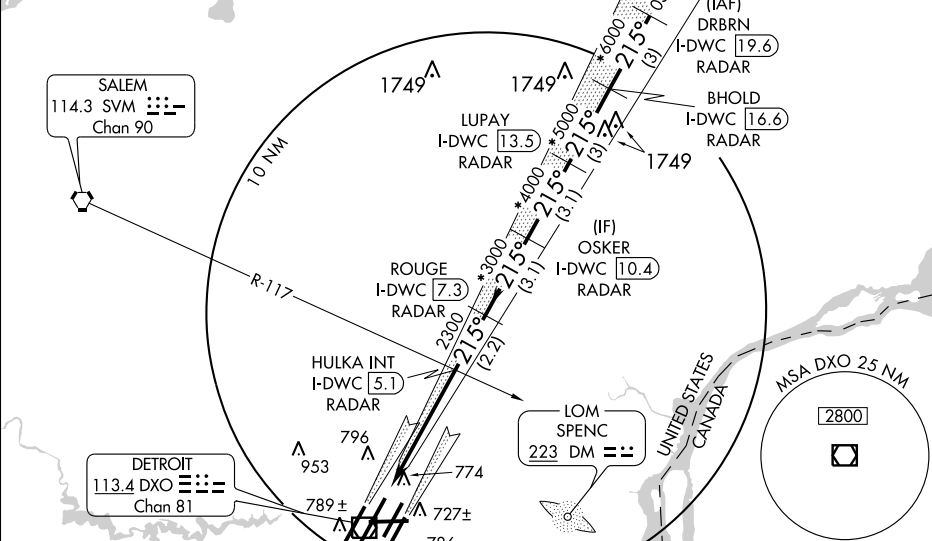
DETROIT APP CON  
**124.05 363.2 (WEST)**  
**125.15 363.2 (EAST)**

METRO TOWER  
**135.0 287.1**  
**PRM 135.775**

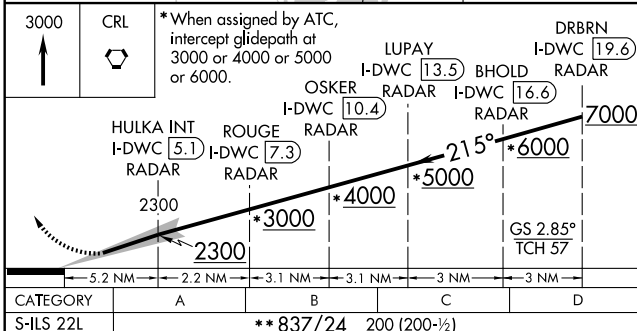
GND CON  
**121.8 (NW)** **119.45 (NE)**  
**123.72 (SW)** **119.25 (SE)**

CLNC DEL  
**120.65**

## RADAR REQUIRED



TDZ/CL Rws 4L, 4R and 3R  
REIL Rws 3L, 9L, 9R and 21R  
HIRL all runways



**ATTENTION ALL USERS OF ILS PRECISION RUNWAY MONITOR (PRM)**

Condensed Briefing Point:

- When instructed, immediately switch to the tower frequency and select the monitor frequency audio.

1. **ATIS.** When the ATIS broadcast advises that simultaneous ILS/PRM approaches are in progress, pilots should brief to fly the ILS/PRM 22L approach. If later advised to expect an ILS 22L approach, the ILS/PRM 22L chart may be used after completing the following briefing items:

- (a) Minimums and missed approach procedures are unchanged.
- (b) Monitor frequency no longer required.
- (c) A lower glideslope intercept altitude may be assigned when advised to expect ILS 22L approach.

2. **Dual VHF Communication required.** To avoid blocked transmissions, each runway will have two frequencies, a primary and a monitor frequency. The tower controller will transmit on both frequencies. The Monitor controller's transmissions, if needed, will override both frequencies. Pilots will **ONLY** transmit on the tower controller's frequency, but will listen to both frequencies. Select the monitor frequency audio only when instructed by ATC to contact the tower. The volume levels should be set about the same on both radios so that the pilots will be able to hear transmissions on at least one frequency if the other is blocked.

3. **All "Breakouts" are to be hand flown** to assure that the maneuver is accomplished in the shortest amount of time. Pilots, when directed by ATC to break off an approach, must assume that an aircraft is blundering toward their course and a breakout must be initiated immediately.

- (a) ATC Directed "Breakouts:" ATC directed breakouts will consist of a turn and a climb or descent. Pilots must always initiate the breakout in response to an air traffic controller instruction. Controllers will give a descending breakout only when there are no other reasonable options available, but in no case will the descent be below minimum vectoring altitude (MVA) which provides at least 1,000 feet required obstruction clearance. The MVA in the final approach segment is 2800 feet north of Detroit Metropolitan Wayne County Airport.

- (b) Phraseology - "TRAFFIC ALERT:" If an aircraft enters the "NO TRANSGRESSION ZONE (NTZ)", the controller will breakout the threatened aircraft on the adjacent approach. The phraseology for the breakout will be:

"TRAFFIC ALERT, (aircraft call sign) TURN (left/right) IMMEDIATELY, HEADING (degrees), CLIMB/DESCEND AND MAINTAIN (altitude)".

4. **ILS Navigation:** Descending on the ILS glideslope ensures complying with any charted crossing restrictions.

Special pilot training required. Pilots who are unable to participate, or dispatchers on their behalf, must contact the FAA Command Center prior to departure (1-800-333-4286 or 703-904-4452) to obtain an arrival reservation. Non-participating pilots enroute to DTW as an alternate, or trained pilots that are unexpectedly unable to participate due to in-flight circumstances will be afforded appropriate arrival services as operational conditions permit. Non-participating pilots shall notify the Cleveland ARTCC as soon as practical, but at least 100 miles from DTW.

LOC/DME I-HUU <b>111.5</b> Chan <b>52</b>	APP CRS <b>035°</b>	Rwy Idg TDZE <b>633</b> Apt Elev <b>645</b>	<b>10001</b>
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## ILS RWY 3R (CAT II)

DETROIT METROPOLITAN WAYNE COUNTY (DTW)



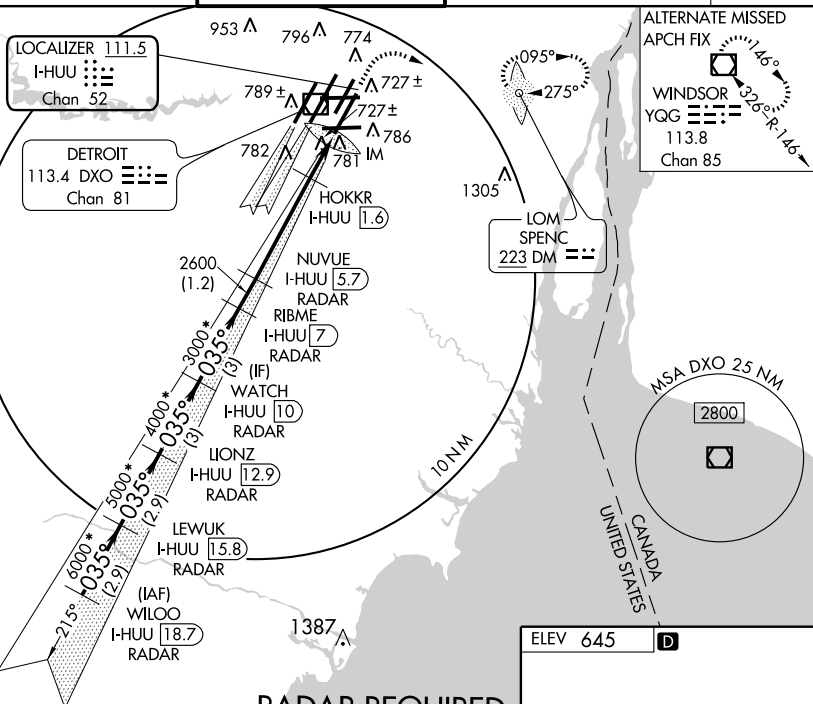
Simultaneous approach authorized with Rwy 4R or Rwy 4L.  
ADF and DME or Radar Required.

ALSF-2



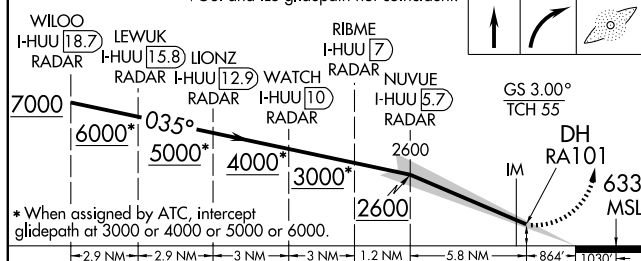
MISSED APPROACH: Climb to 1300 then  
climbing right turn to 3000 direct SPENC LOM  
and hold.

ATIS <b>133.675</b>	DETROIT APP CON <b>124.05 363.2 (WEST)</b> <b>125.15 363.2 (EAST)</b>	METRO TOWER <b>135.0 287.1 (WEST)</b> <b>118.4 287.1 (EAST)</b>	GND CON <b>121.8 (NW) 119.45 (NE)</b> <b>123.72 (SW) 119.25 (SE)</b>	CLNC DEL <b>120.65</b>
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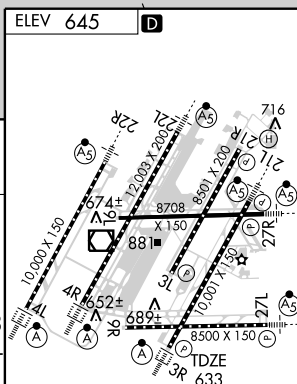
## RADAR REQUIRED

VGSI and ILS glidepath not coincident.



CATEGORY	A	B	C	D
S-ILS 3R		733/12	100 RA 101	

# CATEGORY II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED



TDZ/CL Rwy 4L, 4R and 3R  
REIL Rwy 3L, 9L, 9R and 21R  
HIRL all runways



LOC/DME I-HUU <b>111.5</b> Chan <b>52</b>	APP CRS <b>035°</b>	Rwy Idg TDZE Apt Elev	<b>10001</b> <b>633</b> <b>645</b>
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## ILS RWY 3R (CAT III)

DETROIT METROPOLITAN WAYNE COUNTY (DTW)



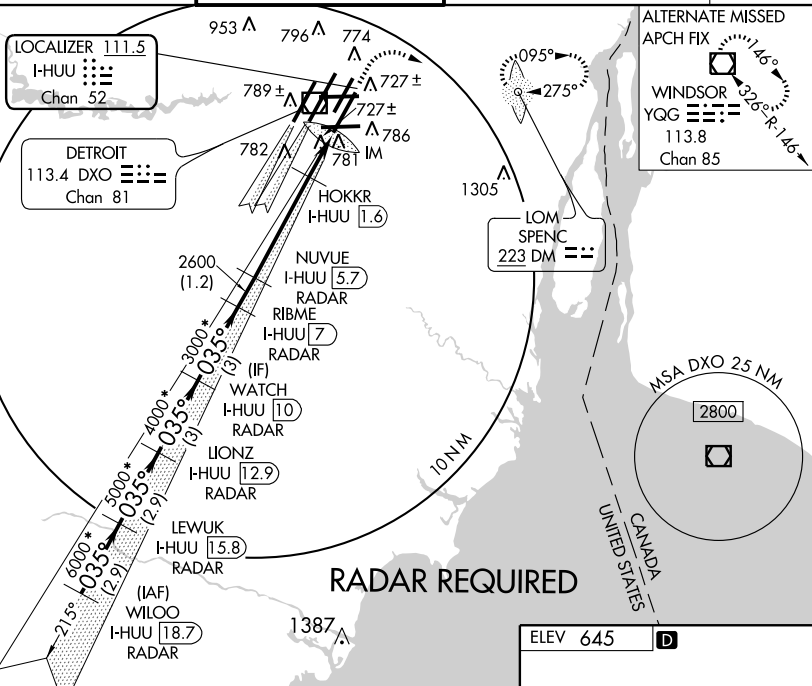
Simultaneous approach authorized with Rwy 4R or Rwy 4L.  
ADF and DME or Radar Required.

ALSIF-2



MISSED APPROACH: Climb to 1300 then  
climbing right turn to 3000 direct SPENC LOM  
and hold.

ATIS	DETROIT APP CON	METRO TOWER	GND CON	CLNC DEL
<b>133.675</b>	<b>124.05 363.2 (WEST)</b> <b>125.15 363.2 (EAST)</b>	<b>135.0 287.1 (WEST)</b> <b>118.4 287.1 (EAST)</b>	<b>121.8 (NW) 119.45 (NE)</b> <b>123.72 (SW) 119.25 (SE)</b>	<b>120.65</b>



ALTERNATE MISSED

APCH FIX

WINDSOR

YQG

113.8

Chan 85

326°-R-146

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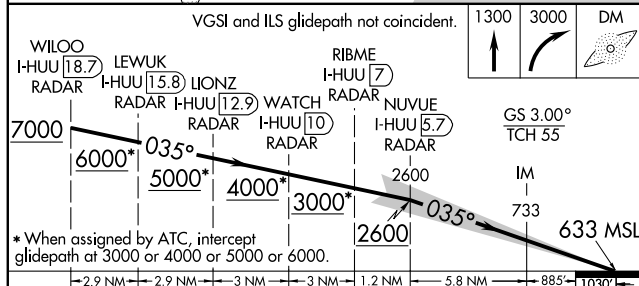
146°

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146°

146°

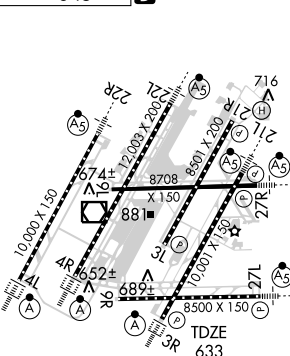
146°



CATEGORY	A	B	C	D
S-ILS 3R		CAT IIIa	RVR 07	
S-ILS 3R		CAT IIIb	RVR 06	
S-ILS 3R		CAT IIIc	NA	

# CATEGORY III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

ELEV 645



TDZ/CL Rwy 4L, 4R and 3R  
REIL Rwy 3L, 9L, 9R and 21R  
HIRL all runways

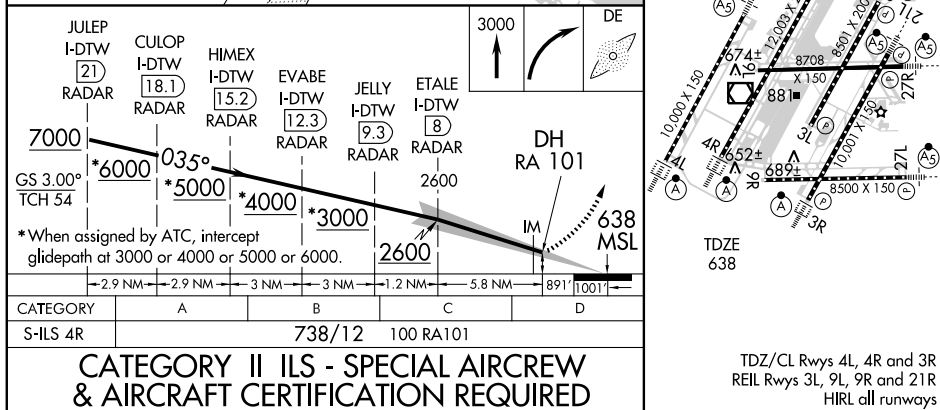
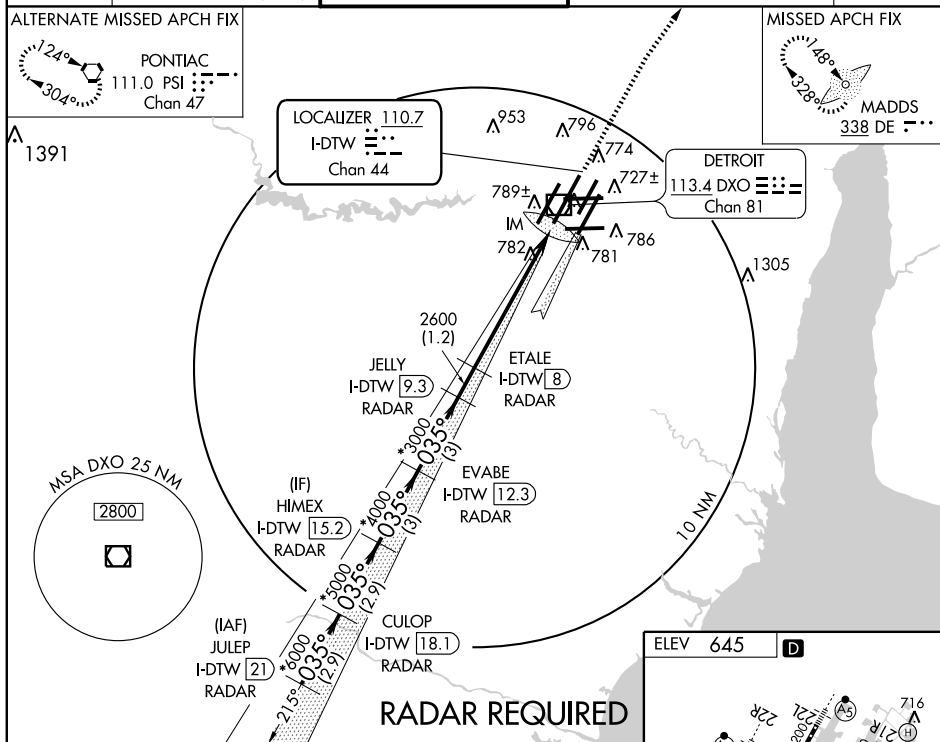
LOC/DME I-DTW <b>110.7</b> Chan <b>44</b>	APP CRS <b>035°</b>	Rwy Idg TDZE Apt Elev	<b>12003</b> <b>638</b> <b>645</b>
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ILS RWY 4R (CAT II)

DETROIT METROPOLITAN WAYNE COUNTY (DTW)

<p>Simultaneous approach authorized with ILS Rwy 3R. ADF and DME or Radar Required.</p>	<p>ALSF-2</p>	<p>MISSED APPROACH: Climb to 3000 then right turn direct MADDS LOM and hold.</p>
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<p>ATIS <b>133.675</b></p>	<p>DETROIT APP CON <b>124.05 363.2</b> (WEST) <b>125.15 363.2</b> (EAST)</p>	<p>METRO TOWER <b>135.0 287.1</b> (WEST) <b>118.4 287.1</b> (EAST)</p>	<p>GND CON <b>121.8</b> (NW) <b>119.45</b> (NE) <b>123.72</b> (SW) <b>119.25</b> (SE)</p>	<p>CLNC DEL <b>120.65</b></p>
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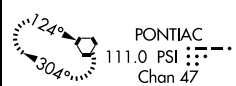
LOC/DME I-DTW <b>110.7</b> Chan <b>44</b>	APP CRS <b>035°</b>	Rwy Idg <b>12003</b> TDZE <b>638</b> Apt Elev <b>645</b>
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## ILS RWY 4R (CAT III)

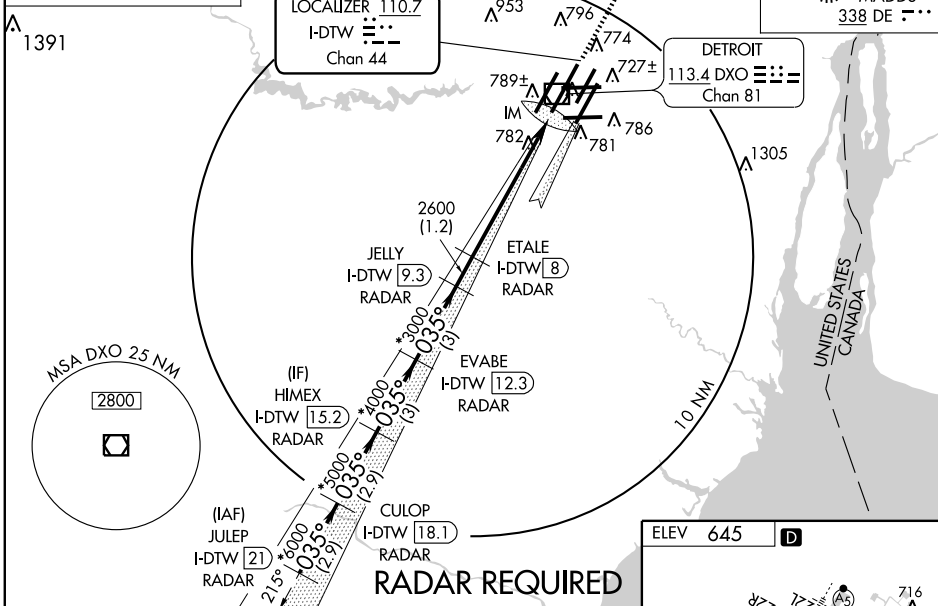
DETROIT METROPOLITAN WAYNE COUNTY (DTW)

 Simultaneous approach authorized with ILS Rwy 3R. ADF and DME or Radar Required.		ALSF-2 		MISSED APPROACH: Climb to 3000 then right turn direct MADDs LOM and hold.	
ATIS <b>133.675</b>	DETROIT APP CON <b>124.05 363.2</b> (WEST) <b>125.15 363.2</b> (EAST)	METRO TOWER <b>135.0 287.1</b> (WEST) <b>118.4 287.1</b> (EAST)		GND CON <b>121.8</b> (NW) <b>119.45</b> (NE) <b>123.72</b> (SW) <b>119.25</b> (SE)	
				CLNC DEL <b>120.65</b>	

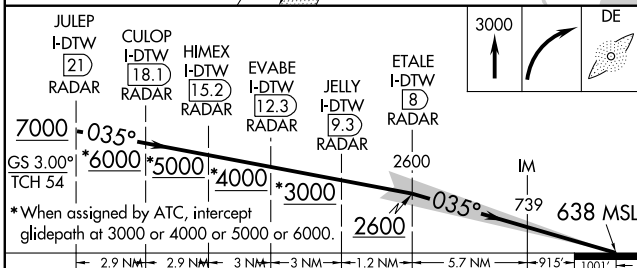
ALTERNATE MISSED APCH FIX



MISSED APCH FIX

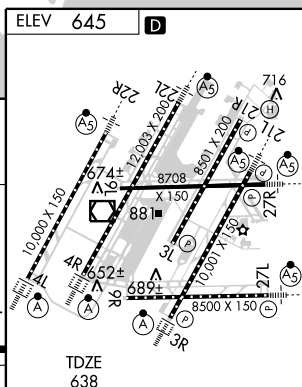


## RADAR REQUIRED



CATEGORY	A	B	C	D
S-ILS 4R		CAT IIIa	RVR 07	
S-ILS 4R		CAT IIIb	RVR 06	
S-ILS 4R		CAT IIIc	NA	

CATEGORY III ILS - SPECIAL AIRCREW  
& AIRCRAFT CERTIFICATION REQUIRED



TDZ/CL Rwy 4L, 4R and 3R  
REIL Rwy 3L, 9L, 9R and 21R  
HIRL all runways

DETROIT, MICHIGAN

AL-119 (FAA)

ILS Y PRM RWY 4L  
(SIMULTANEOUS CLOSE PARALLEL)  
DETROIT METROPOLITAN WAYNE COUNTY (DTW)

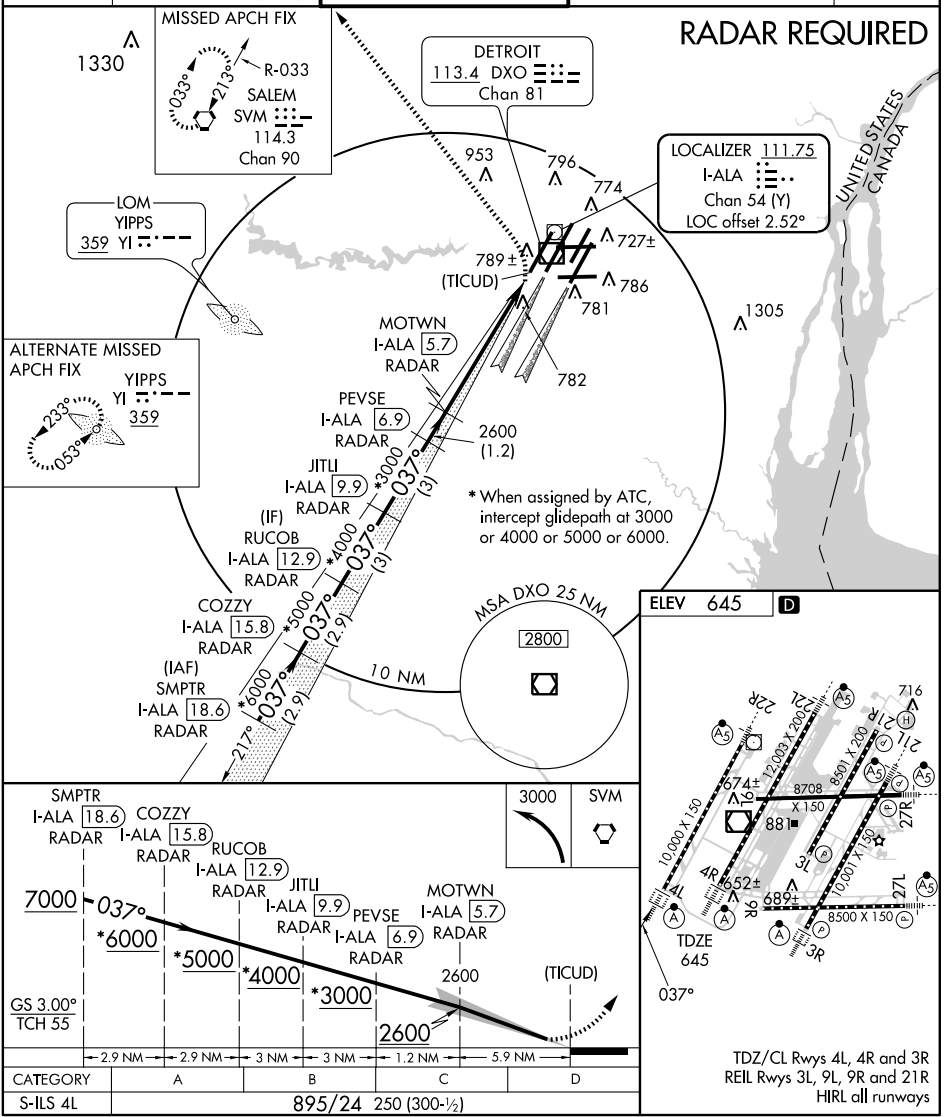
LOC/DME I-ALA <b>111.75</b> Chan <b>54</b> (Y)	APP CRS <b>037°</b>	Rwy Idg TDZE Apt Elev <b>10000</b> <b>645</b> <b>645</b>
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**▼** DME or RADAR required. Procedure NA when glideslope not available.  
See additional requirements on AAPP. Dual VHF comm required.  
Simultaneous close parallel approach authorized with ILS PRM RWY 4R,  
ILS PRM Rwy 4R (CAT II), ILS PRM Rwy 4R (CAT III) and ILS PRM Rwy 3R,  
ILS PRM Rwy 3R (CAT II), ILS PRM Rwy 3R (CAT III).

ALSF-2

MISSED APPROACH: Climbing  
left turn to 3000 direct SVM  
VORTAC and hold.

ATIS <b>133.675</b>	DETROIT APP CON <b>124.05 363.2 (WEST)</b> <b>125.15 363.2 (EAST)</b>	METRO TOWER <b>128.125 287.1</b> <b>PRM 127.05</b>	GND CON <b>121.8 (NW)</b> <b>119.45 (NE)</b> <b>123.72 (SW)</b> <b>119.25 (SE)</b>	CLNC DEL <b>120.65</b>
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EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010

DETROIT, MICHIGAN  
Orig-A 17DEC09

41°13'N - 83°21'W

DETROIT METROPOLITAN WAYNE COUNTY (DTW)

ILS Y PRM RWY 4L (SIMULTANEOUS CLOSE PARALLEL)

**ATTENTION ALL USERS OF ILS PRECISION RUNWAY MONITOR (PRM)**

Condensed Briefing Point:

- When instructed, immediately switch to the tower frequency and select the monitor frequency audio.
- Exit the runway at Taxiway A7 (6700 ft) or A8 (7700 ft) whenever practical, see Taxiway Use below.

1. **ATIS.** When the ATIS broadcast advises that simultaneous ILS/PRM approaches are in progress, pilots should brief to fly the ILS/PRM 4L approach. If later advised to expect an ILS 4L Yankee approach, the ILS/PRM 4L chart may be used after completing the following briefing items:

- (a) Minimums and missed approach procedures are unchanged.
- (b) Monitor frequency no longer required.
- (c) A lower glideslope intercept altitude may be assigned when advised to expect ILS 4L Yankee approach.

**2. Dual VHF Communication required.** To avoid blocked transmissions, each runway will have two frequencies, a primary and a monitor frequency. The tower controller will transmit on both frequencies. The Monitor controller's transmissions, if needed, will override both frequencies. Pilots will ONLY transmit on the tower controller's frequency, but will listen to both frequencies. Select the monitor frequency audio only when instructed by ATC to contact the tower. The volume levels should be set about the same on both radios so that the pilots will be able to hear transmissions on at least one frequency if the other is blocked.

3. All **"Breakouts"** are to be hand flown to assure that the maneuver is accomplished in the shortest amount of time. Pilots, when directed by ATC to break off an approach, must assume that an aircraft is blundering toward their course and a breakout must be initiated immediately.

- (a) ATC Directed "Breakouts:" ATC directed breakouts will consist of a turn and a climb or descent. Pilots must always initiate the breakout in response to an air traffic controller instruction. Controllers will give a descending breakout only when there are no other reasonable options available, but in no case will the descent be below minimum vectoring altitude (MVA) which provides at least 1,000 feet required obstruction clearance. The MVA in the final approach segment is 2400 feet south of Detroit Metropolitan Wayne County Airport.
- (b) Phraseology - "TRAFFIC ALERT:" If an aircraft enters the "NO TRANSGRESSION ZONE (NTZ)," the controller will breakout the threatened aircraft on the adjacent approach. The phraseology for the breakout will be:

"TRAFFIC ALERT, (aircraft call sign) TURN (left/right) IMMEDIATELY, HEADING (degrees), CLIMB/DESCEND AND MAINTAIN (altitude)".

4. **ILS Navigation:** Descending on the ILS glideslope ensures complying with any charted crossing restrictions.

**5. Taxiway Use:** Because of the location of the offset LOC critical area, whenever practical, pilots should exit the runway at taxiway A7, 6700 ft or A8, 7700 ft. If feasible, do not stop on taxiways A9 and A10, or on taxiway A northeast of taxiway V.

Special pilot training required. Pilots who are unable to participate, or dispatchers on their behalf, must contact the FAA Command Center prior to departure (1-800-333-4286 or 703-904-4452) to obtain an arrival reservation. Non-participating pilots enroute to DTW as an alternate, or trained pilots that are unexpectedly unable to participate due to in-flight circumstances will be afforded appropriate arrival services as operational conditions permit. Non-participating pilots shall notify the Cleveland ARTCC as soon as practical, but at least 100 miles from DTW.



**ATTENTION ALL USERS OF ILS PRECISION RUNWAY MONITOR (PRM)**

**Condensed Briefing Point:**

- When instructed, immediately switch to the tower frequency and select the monitor frequency audio.
- Exit the runway at Taxiway A4 (6700 ft) or A3 (7700 ft) whenever practical, see Exit Taxiway Use below.

1. **ATIS.** When the ATIS broadcast advises that simultaneous ILS/PRM approaches are in progress, pilots should brief to fly the ILS/PRM 22R approach. If later advised to expect an ILS 22R Yankee approach, the ILS/PRM 22R chart may be used after completing the following briefing items:

- (a) Minimums and missed approach procedures are unchanged.
- (b) Monitor frequency no longer required.
- (c) A lower glideslope intercept altitude may be assigned when advised to expect ILS 22R Yankee approach.

2. **Dual VHF Communication required.** To avoid blocked transmissions, each runway will have two frequencies, a primary and a monitor frequency. The tower controller will transmit on both frequencies. The Monitor controller's transmissions, if needed, will override both frequencies. Pilots will ONLY transmit on the tower controller's frequency, but will listen to both frequencies. Select the monitor frequency audio only when instructed by ATC to contact the tower. The volume levels should be set about the same on both radios so that the pilots will be able to hear transmissions on at least one frequency if the other is blocked.

3. **All "Breakouts" are to be hand flown** to assure that the maneuver is accomplished in the shortest amount of time. Pilots, when directed by ATC to break off an approach, must assume that an aircraft is blundering toward their course and a breakout must be initiated immediately.

- (a) ATC Directed "Breakouts:" ATC directed breakouts will consist of a turn and a climb or descent. Pilots must always initiate the breakout in response to an air traffic controller instruction. Controllers will give a descending breakout only when there are no other reasonable options available, but in no case will the descent be below minimum vectoring altitude (MVA) which provides at least 1,000 feet required obstruction clearance. The MVA in the final approach segment is 2800 feet north of Detroit Metropolitan Wayne County Airport.
- (b) Phraseology - "TRAFFIC ALERT:" If an aircraft enters the "NO TRANSGRESSION ZONE (NTZ)," the controller will breakout the threatened aircraft on the adjacent approach. The phraseology for the breakout will be:

"TRAFFIC ALERT, (aircraft call sign) TURN (left/right) IMMEDIATELY,  
HEADING (degrees), CLIMB/DESCEND AND MAINTAIN (altitude)".

4. **ILS Navigation:** Descending on the ILS glideslope ensures complying with any charted crossing restrictions.

5. **Exit Taxiway Use:** Because of the location of the offset LOC critical area, whenever possible, pilots should exit the runway at taxiway A4, 6700 ft or A3, 7700 ft. If practical, do not stop on taxiway A between taxiway A3 and taxiway Q.

Special pilot training required. Pilots who are unable to participate, or dispatchers on their behalf, must contact the FAA Command Center prior to departure (1-800-333-4286 or 703-904-4452) to obtain an arrival reservation. Non-participating pilots enroute to DTW as an alternate, or trained pilots that are unexpectedly unable to participate due to in-flight circumstances will be afforded appropriate arrival services as operational conditions permit. Non-participating pilots shall notify the Cleveland ARTCC as soon as practical, but at least 100 miles from DTW.

LOC/DME I-ALA <b>111.75</b> Chan <b>54 (Y)</b>	APP CRS <b>037°</b>	Rwy Idg <b>10000</b> TDZE <b>645</b> Apt Elev <b>645</b>
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ILS Y RWY 4L

DETROIT METROPOLITAN WAYNE COUNTY (DTW)

**T** DME or RADAR REQUIRED. LOC procedure NA during simultaneous operations. Simultaneous approach authorized with Rwy 3R. Procedure NA when glideslope not available.

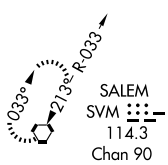
ALSF-2



**MISSED APPROACH:** Climbing left turn to 3000 direct SVM VORTAC and hold.

ATIS <b>133.675</b>	DETROIT APP CON <b>124.05 363.2</b> (WEST) <b>125.15 363.2</b> (EAST)	METRO TOWER <b>135.0 287.1</b> (WEST) <b>118.4 287.1</b> (EAST)	GND CON <b>121.8</b> (NW) <b>119.45</b> (NE) <b>123.72</b> (SW) <b>119.25</b> (SE)	CLNC DEL <b>120.65</b>
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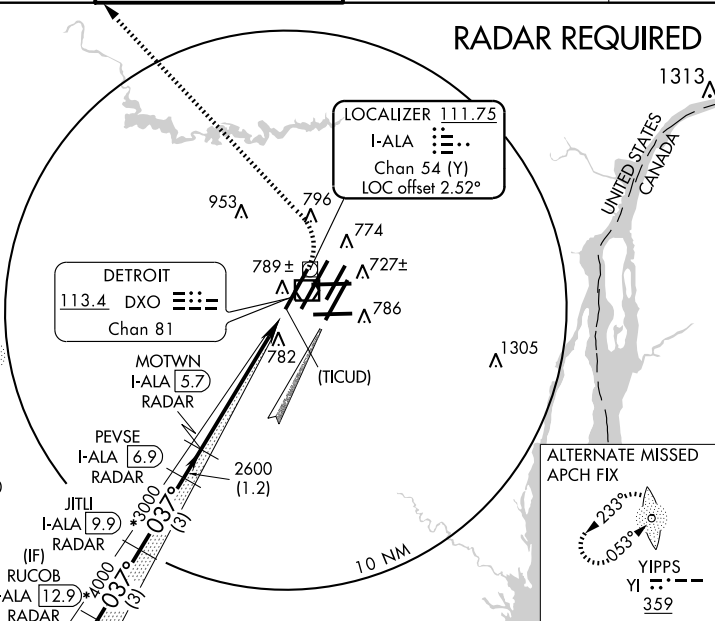
MISSED APCH FIX



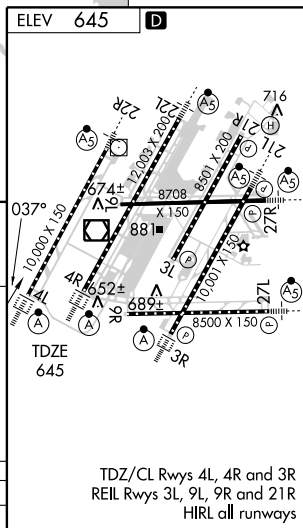
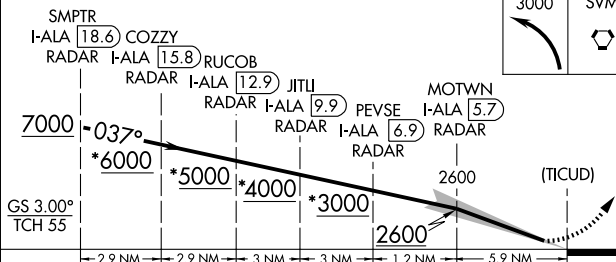
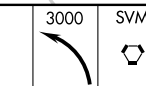
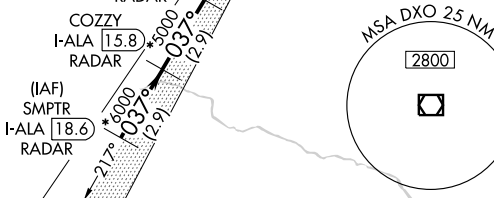
- LOM -

YIPPS  
359 YI - - -

\* When assigned by ATC,  
intercept glidepath at 3000  
or 4000 or 5000 or 6000.



ALTERNATE MISSED  
APCH FIX



TDZ/CL Rwy 4L, 4R and 3R  
REIL Rwy 3L, 9L, 9R and 21R  
HIRI all runways

CATEGORY	A	B	C	D
S-ILS 4L	895/24 250 (300-½)			

DETROIT, MICHIGAN

Orig 10266

DETROIT METROPOLITAN WAYNE COUNTY (DTW)

42°13'N - 83°21'W

ILS Y RWY 4L



LOC/DME I-BZB <b>111.75</b> Chan <b>54 (Y)</b>	APP CRS <b>212°</b>	Rwy ldg TDZE Apt Elev <b>10000</b> <b>642</b> <b>645</b>
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ILS Y RWY 22R

DETROIT METROPOLITAN WAYNE COUNTY (DTW)



DME or RADAR REQUIRED.  
Simultaneous approach authorized with Rwy 21L.  
Procedure NA when glideslope not available.  
LOC procedure NA during simultaneous operations.

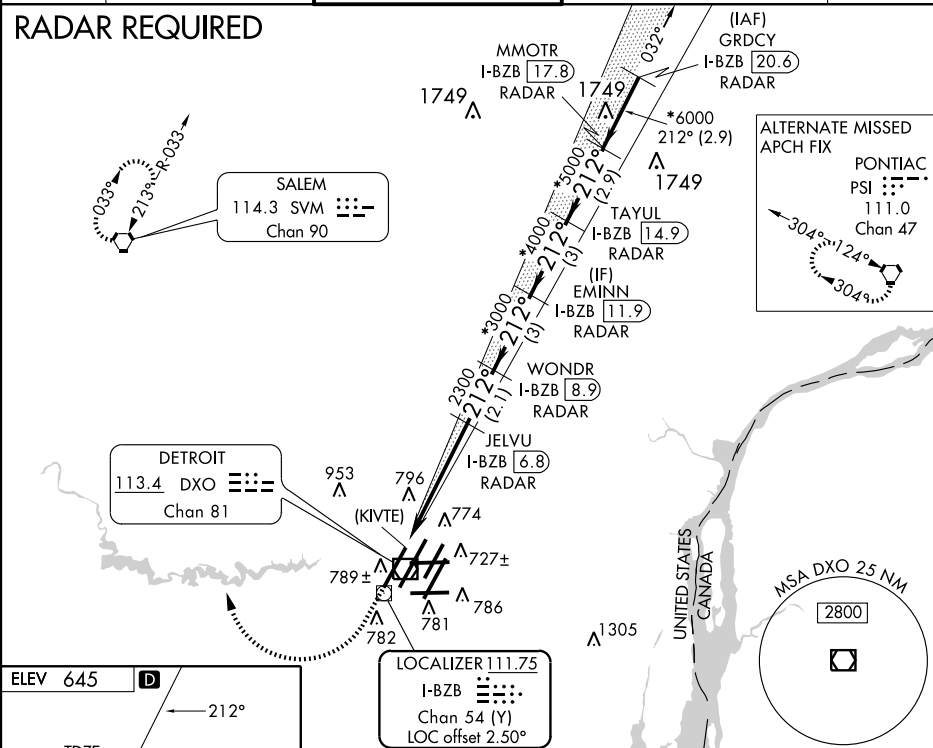
MALSR



MISSED APPROACH: Climb to 1300  
then climbing right turn to 3000 direct  
SVM VORTAC and hold.

ATIS <b>133.675</b>	DETROIT APP CON <b>124.05 363.2 (WEST)</b> <b>125.15 363.2 (EAST)</b>	METRO TOWER <b>135.0 287.1 (WEST)</b> <b>118.4 287.1 (EAST)</b>	GND CON <b>121.8 (NW) 119.45 (NE)</b> <b>123.72 (SW) 119.25 (SE)</b>	CLNC DEL <b>120.65</b>
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## RADAR REQUIRED



EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010

LOC/DME I-HJT	APP CRS	Rwy Idg	10000
111.95	035°	TDZE	645
Chan 56 (Y)		Apt Elev	645

## ILS Z or LOC RWY 4L

DETROIT METROPOLITAN WAYNE COUNTY (DTW)

**V** DME or RADAR Required.  
Simultaneous approach authorized with Rwy 3R.  
LOC procedure NA during simultaneous operations.

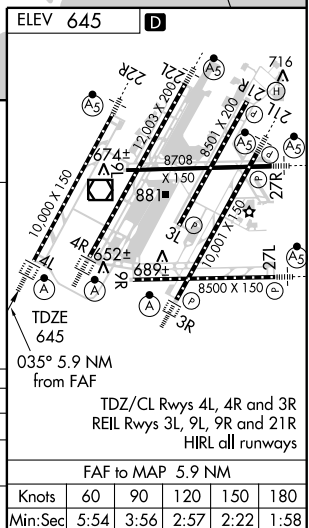
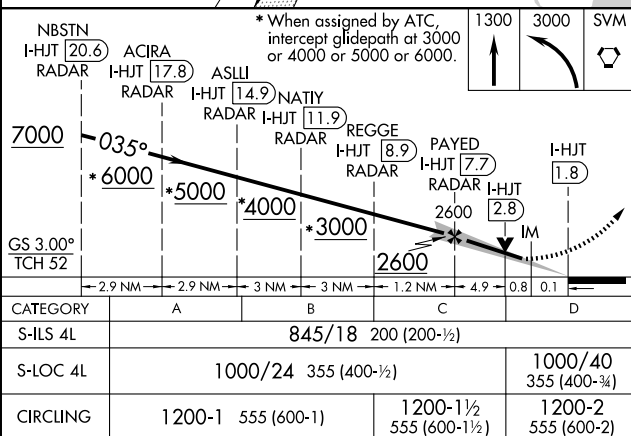
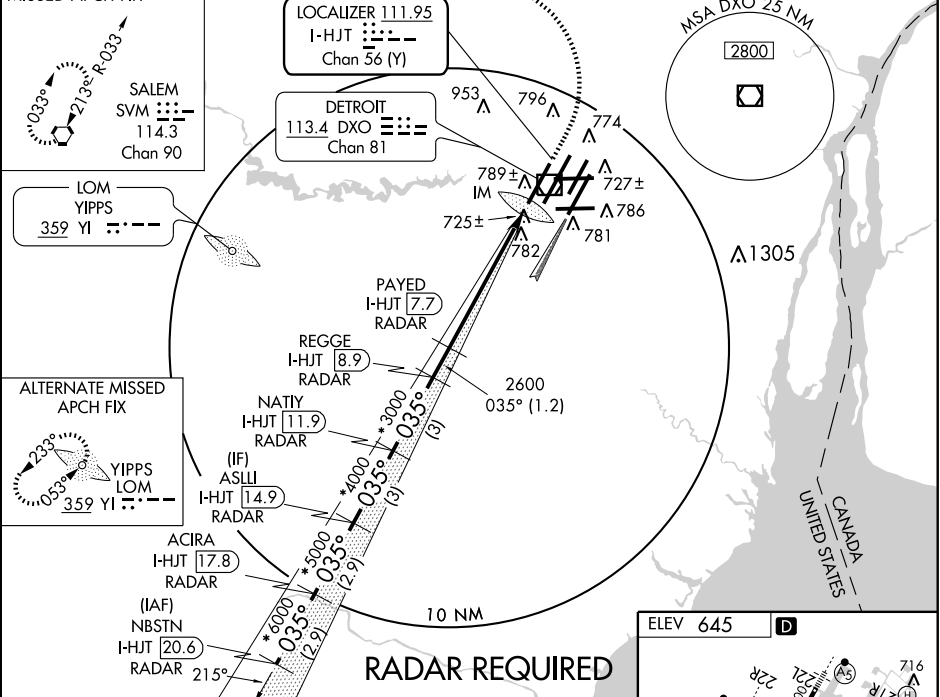
ALSF-2



MISSED APPROACH: Climb to 1300 then climbing left turn to 3000 direct SVM VORTAC and hold.

ATIS <b>133.675</b>	DETROIT APP CON <b>124.05 363.2 (WEST)</b> <b>125.15 363.2 (EAST)</b>	METRO TOWER <b>135.0 287.1 (WEST)</b> <b>118.4 287.1 (EAST)</b>	GND CON <b>121.8 (NW) 119.45 (NE)</b> <b>123.72 (SW) 119.25 (SE)</b>	CLNC DEL <b>120.65</b>
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MISSED APCH FIX



LOC/DME I-JKI <b>111.95</b> Chan <b>56</b> (Y)	APP CRS <b>215°</b>	Rwy Idg TDZE Apt Elev <b>645</b>	<b>10,000</b> <b>642</b> <b>645</b>
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# ILS Z or LOC RWY 22R

DETROIT METROPOLITAN WAYNE COUNTY (DTW)

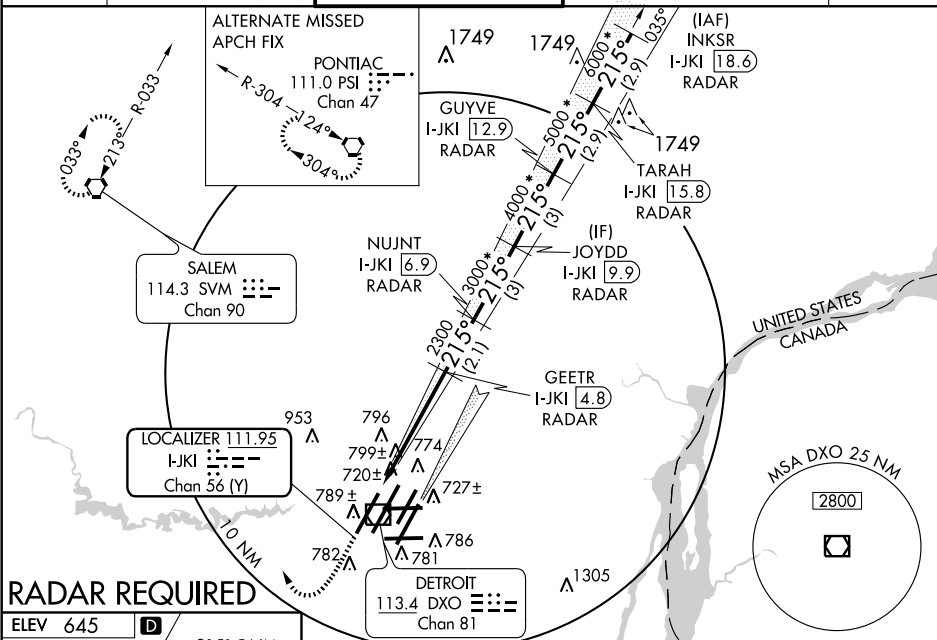
**Simultaneous approach authorized with Rwy 21L.**  
**\*\*RVR 1800 authorized with the use of FD or AP or HUD to DA.**  
**DME or RADAR Required. LOC procedure NA during simultaneous operations.**

MALSR

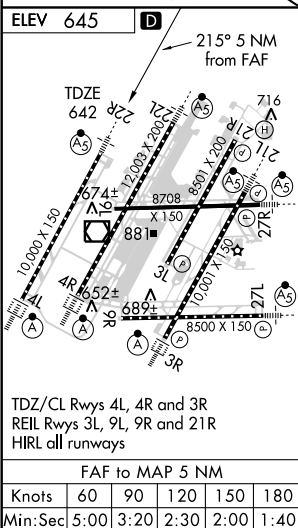


**MISSED APPROACH:** Climb to 1300 then climbing right turn via heading 225° to 3000 then right turn direct SVM VORTAC and hold.

ATIS <b>133.675</b>	DETROIT APP CON <b>124.05 363.2</b> (WEST) <b>125.15 363.2</b> (EAST)	METRO TOWER <b>135.0 287.1</b> (WEST) <b>118.4 287.1</b> (EAST)	GND CON <b>121.8</b> (NW) <b>119.45</b> (NE) <b>123.72</b> (SW) <b>119.25</b> (SE)	CLNC DEL <b>120.65</b>
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## RADAR REQUIRED



DETROIT, MICHIGAN

Amdt 2A 17DEC09

DETROIT METROPOLITAN WAYNE COUNTY (DTW)

42°13'N - 83°21'W

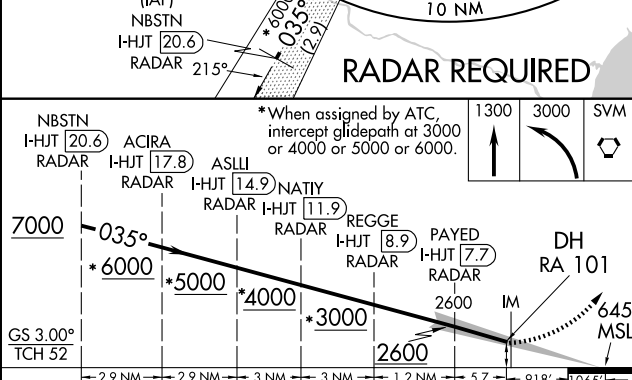
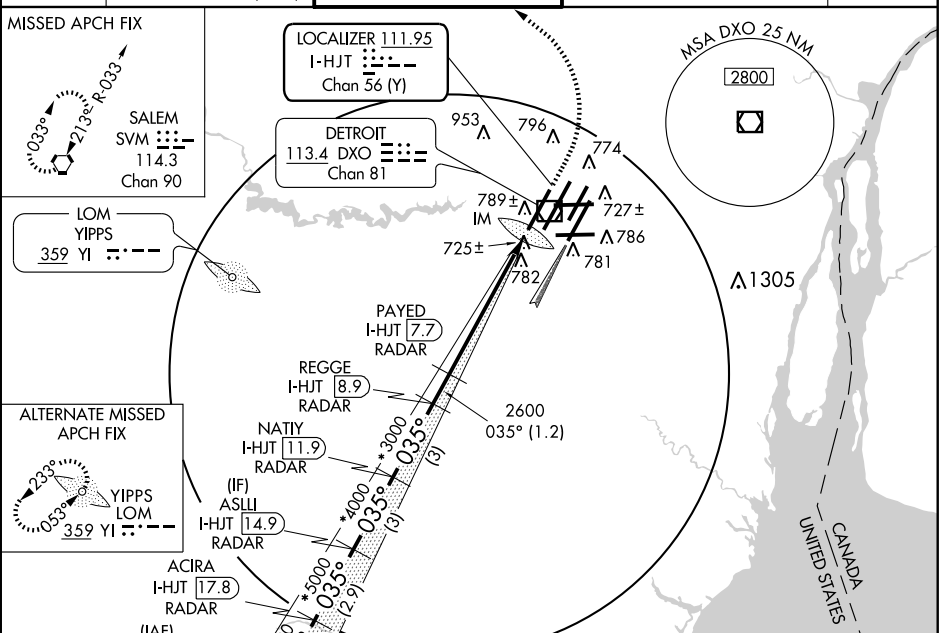
ILS Z or LOC RWY 22R

LOC/DME I-HJT <b>111.95</b> Chan <b>56</b> (Y)	APP CRS <b>035°</b>	Rwy Idg TDZE Apt Elev	<b>10000</b> <b>645</b> <b>645</b>
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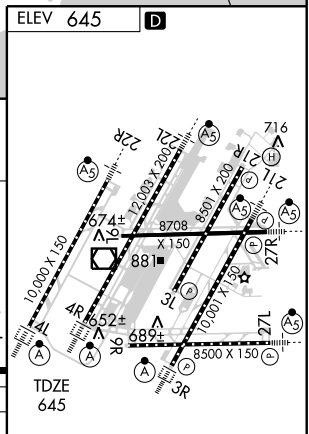
**ILS Z RWY 4L (CAT II)**
**DETROIT METROPOLITAN WAYNE COUNTY (DTW)**

<b>V</b> DME or RADAR Required. Simultaneous approach authorized with Rwy 3R. LOC procedure NA during simultaneous operations.	ALSF-2 	MISSED APPROACH: Climb to 1300 then climbing left turn to 3000 direct SVM VORTAC and hold.
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ATIS <b>133.675</b>	DETROIT APP CON <b>124.05 363.2 (WEST)</b> <b>125.15 363.2 (EAST)</b>	METRO TOWER <b>135.0 287.1 (WEST)</b> <b>118.4 287.1 (EAST)</b>	GND CON <b>121.8 (NW)</b> <b>119.45 (NE)</b> <b>123.72 (SW)</b> <b>119.25 (SE)</b>	CLNC DEL <b>120.65</b>
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CATEGORY	A	B	C	D
S-ILS 4L	745/12	100 RA 101		

**CATEGORY II ILS - SPECIAL AIRCREW  
& AIRCRAFT CERTIFICATION REQUIRED**

 TDZ/CL Rwy 4L, 4R and 3R  
REIL Rwy 3L, 9L, 9R and 21R  
HIRL all runways

LOC/DME I-HJT <b>111.95</b> Chan <b>56</b> (Y)	APP CRS <b>035°</b>	Rwy Idg TDZE Apt Elev	<b>10000</b> <b>645</b> <b>645</b>
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**ILS Z RWY 4L (CAT III)**

DETROIT METROPOLITAN WAYNE COUNTY (DTW)



DME or RADAR Required.  
Simultaneous approach authorized with Rwy 3R.  
LOC procedure NA during simultaneous operations.

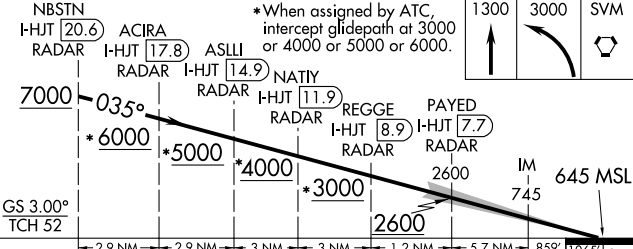
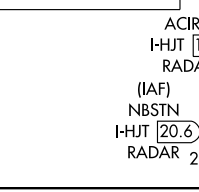
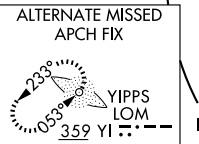
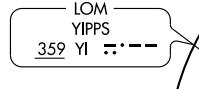
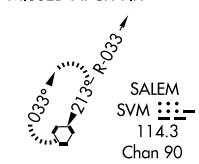
ALSF-2



MISSED APPROACH: Climb to 1300 then climbing  
left turn to 3000 direct SVM VORTAC and hold.

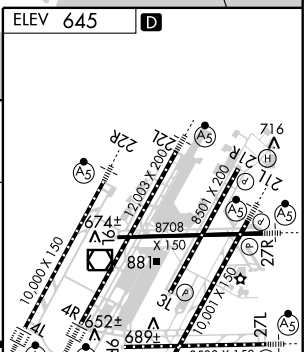
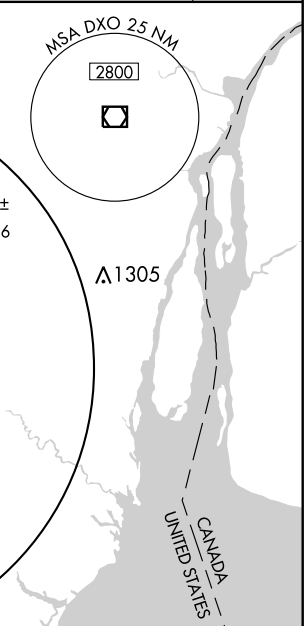
ATIS <b>133.675</b>	DETROIT APP CON <b>124.05 363.2</b> (WEST) <b>125.15 363.2</b> (EAST)	METRO TOWER <b>135.0 287.1</b> (WEST) <b>118.4 287.1</b> (EAST)	GND CON <b>121.8</b> (NW) <b>119.45</b> (NE) <b>123.72</b> (SW) <b>119.25</b> (SE)	CLNC DEL <b>120.65</b>
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MISSED APCH FIX



CATEGORY	A	B	C	D
S-ILS 4L	CAT IIIa	RVR 07		
S-ILS 4L	CAT IIIb	RVR 06		
S-ILS 4L	CAT IIIc	NA		

**CATEGORY III ILS - SPECIAL AIRCREW  
& AIRCRAFT CERTIFICATION REQUIRED**

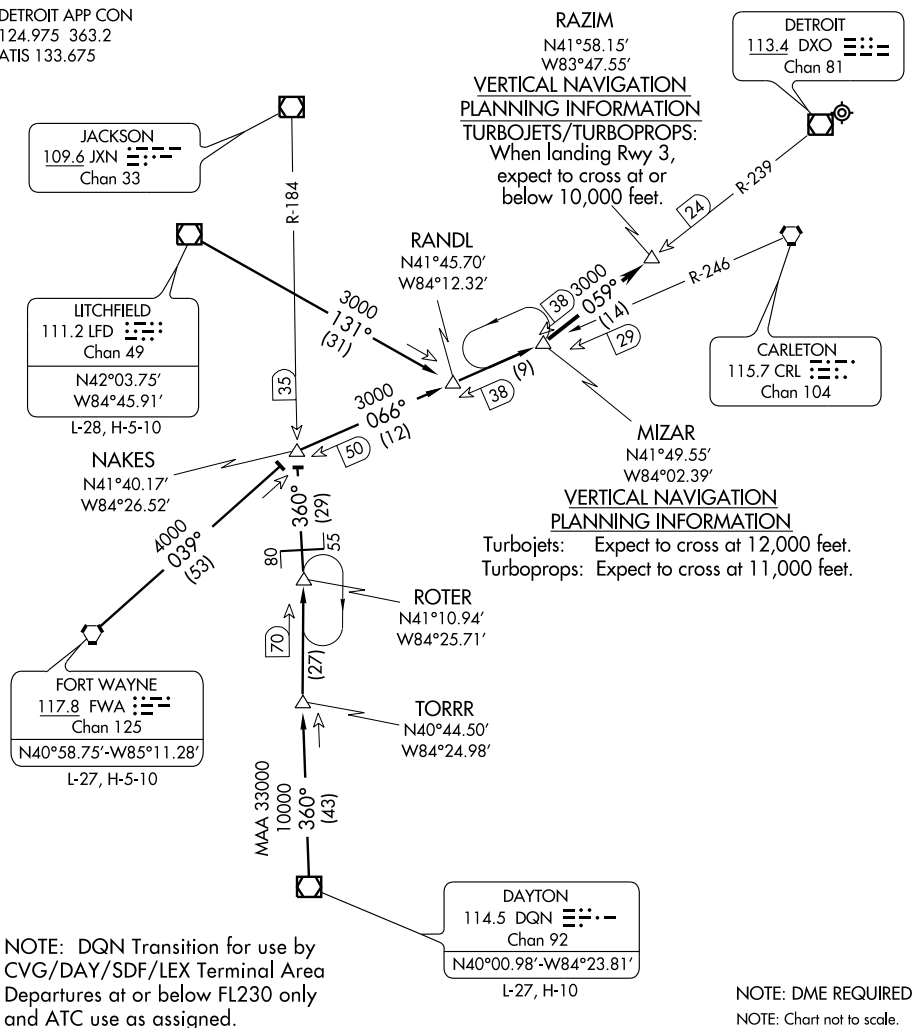


CATEGORY	A	B	C	D
S-ILS 4L	CAT IIIa	RVR 07		
S-ILS 4L	CAT IIIb	RVR 06		
S-ILS 4L	CAT IIIc	NA		

TDZ/CL Rwy 4L, 4R and 3R  
REIL Rwy 3L, 9L, 9R and 21R  
HIRL all runways

## MIZAR THREE ARRIVAL

ST-119 (FAA)

DETROIT METROPOLITAN WAYNE COUNTY  
DETROIT, MICHIGANDETROIT APP CON  
124.975 363.2  
ATIS 133.675

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010

**DAYTON TRANSITION (DQN.MIZAR3):** From over DQN VOR/DME via DQN R-360 and JXN R-184 to NAKES INT, then via CRL VORTAC R-246 to MIZAR DME. Thence. . .

**FORT WAYNE TRANSITION (FWA.MIZAR3):** From over FWA VORTAC via FWA R-039 to NAKES INT, then via CRL R-246 to MIZAR DME. Thence. . .

**LITCHFIELD TRANSITION (LFD.MIZAR3):** From over LFD VOR/DME via LFD R-131 to RANDL INT, then via CRL R-246 to MIZAR DME. Thence. . .

. . . . From over MIZAR DME via DXO VOR/DME R-239 to RAZIM DME. Expect radar vectors to final approach course.

## MIZAR THREE ARRIVAL

(MIZAR.MIZAR3) 08325

DETROIT, MICHIGAN  
DETROIT METROPOLITAN WAYNE COUNTY

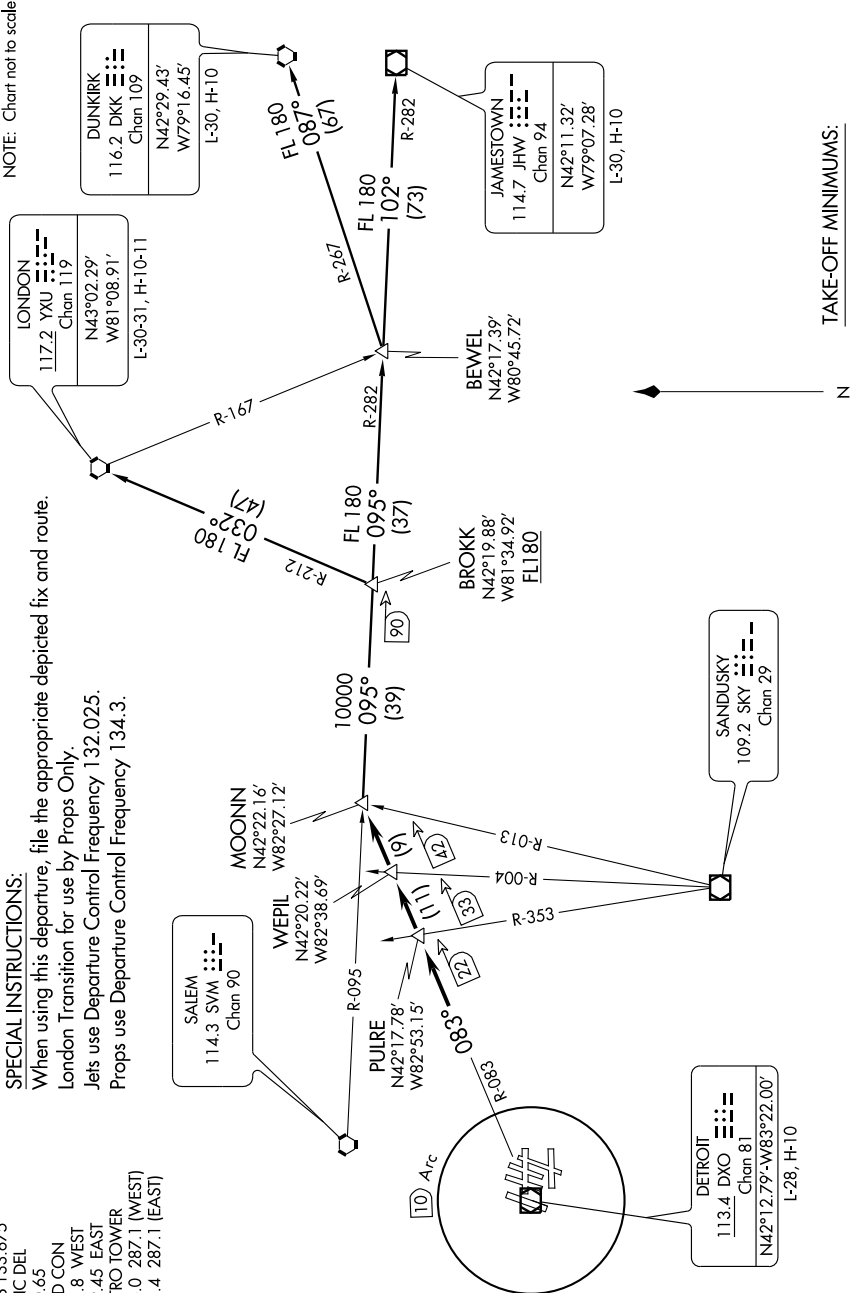
**EC-1, 23 SEP 2010 to 21 OCT 2010**

ATIS 133.675  
CLNC DEL  
120.65  
GND CON  
121.8 WEST  
1119.45 EAST  
METRO TOWER  
1135.0 287.1 (P)  
118.4 287.1 (P)

**SPECIAL INSTRUCTIONS:**

When using this departure, file the appropriate depicted fix and route.  
London Transition for use by Props Only.  
Helts use Departure Control Frequency 132.025.  
Props use Departure Control Frequency 134.3.

NOTE: Chart not to scale.



### TAKE-OFF MINIMUMS:

Rwy 3L, 3R, 4L, 4R, 9L, 9R, 21L, 21R,  
22L, 22R, 27L, 27R: STANDARD.

NOTE: RADAR Required.

NARRATIVE ON FOLLOWING PAGE)

EC-1. 23 SEP 2010 to 21 OCT 2010

MOONN TWO DEPARTURE

(MOONN2.MOONN)

1026E

DETROIT, MICHIGAN

DETROIT METROPOLITAN WAYNE COUNTY (DTW)



## DEPARTURE ROUTE DESCRIPTION

TAKE-OFF ALL RUNWAYS: Climb via assigned heading for radar vectors to intercept DXO VOR/DME R-083 to MOONN INT, then via (transition). Jets maintain 10,000 feet, cross DXO VOR/DME 10 DME at or above 5,000 feet for noise abatement. If unable to comply, advise ATC prior to departure. Props maintain 4,000 feet or lower assigned altitude. Expect clearance to filed altitude/flight level ten (10) minutes after departure.

DUNKIRK TRANSITION (MOONN2.DKK): From over MOONN INT via SVM R-095 to BROKK INT, then via SVM R-095 and JHW R-282 to BEWEL INT, then via DKK R-267 to DKK VORTAC.

JAMESTOWN TRANSITION (MOONN2.JHW): From over MOONN INT via SVM R-095 to BROKK INT, then via SVM R-095 and JHW R-282 to BEWEL INT, then via JHW R-282 to JHW VOR/DME.

LONDON TRANSITION (MOONN2.YXU): From over MOONN INT via SVM R-095 to BROKK INT, then via YXU R-212 to YXU VORTAC.

TAKE-OFF OBSTACLES

Rwy 3R: Headwall 399' from DER, 566' right of centerline, 17' AGL/647' MSL.

Rwy 4L: Multiple transmission towers 1516' from DER, 827' left of centerline, up to 60' AGL/690' MSL.

Multiple antennas 2751' from DER, 762' right of centerline, up to 84' AGL/714' MSL.

Rwy 4R: Antenna on building 3348' from DER, 1301' left of centerline, 100' AGL/736' MSL.

Rwy 9L: Multiple trees 968' to 2519' from DER, 462' left of centerline and 1173' right of centerline, up to 85' AGL/715' MSL.

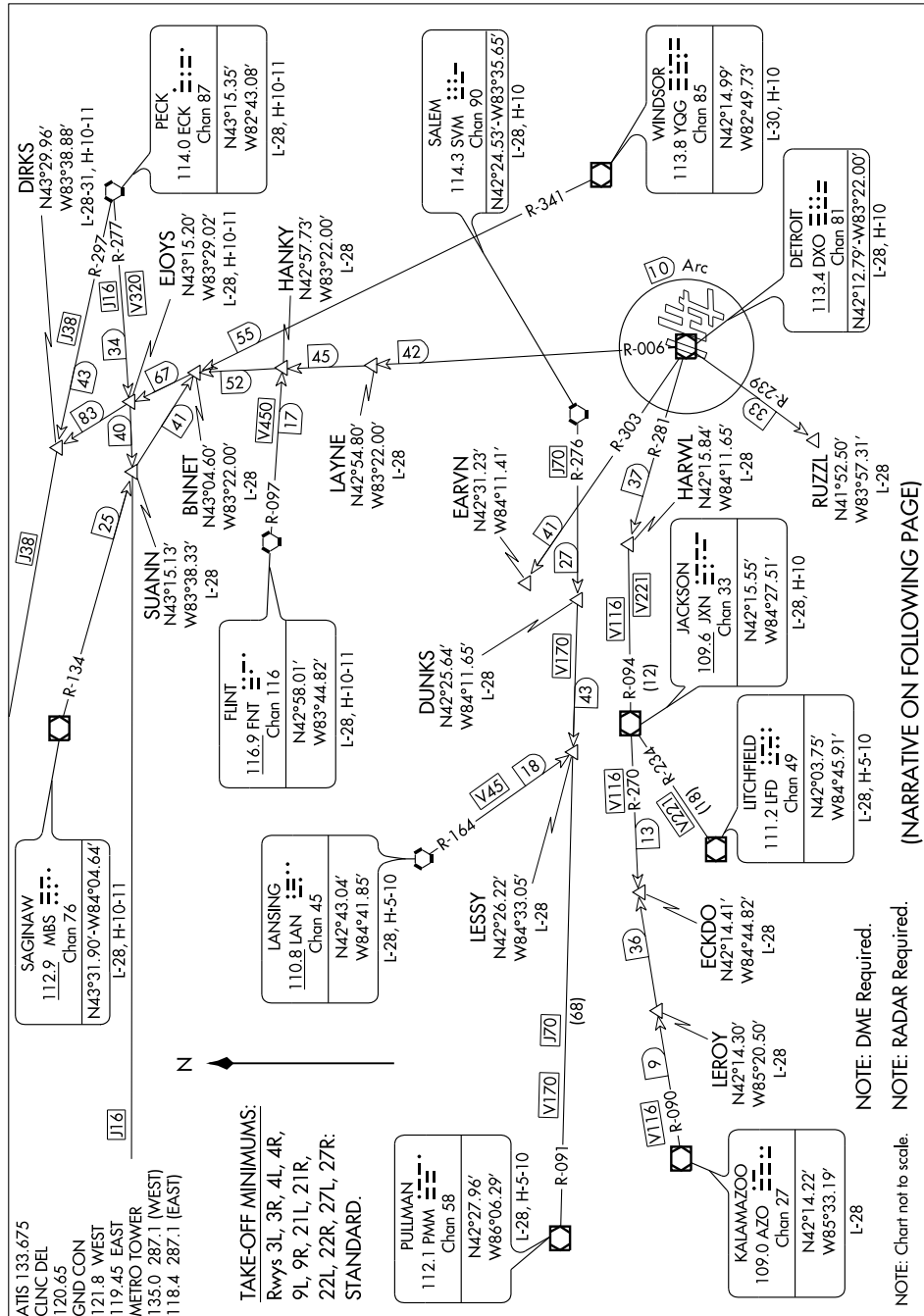
Rwy 9R: Tree 1837' from DER, 947' right of centerline, 50' AGL/686' MSL.

Rwy 21L: Multiple trees 1079' to 3910' from DER, 586' left of centerline and 1188' right of centerline, up to 100' AGL/733' MSL.

Rwy 22L: Multiple trees 794' to 3694' from DER, 611' right of centerline and 1381' left of centerline, up to 110' AGL/740' MSL.

Rwy 27R: Rod on ASR 4461' from DER, 464' left of centerline, 106' AGL/756' MSL.





PALACE THREE DEPARTURE



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF ALL RUNWAYS: Climb via assigned heading for radar vectors to join the assigned Airway or Radial then proceed to the assigned departure fix, thence via the assigned route. Jets maintain 10,000 feet, cross the DXO VOR/DME 10 DME Arc at or above 5,000 feet for noise abatement. If unable to comply, advise ATC prior to departure. Props maintain 4,000 feet or lower assigned altitude. Expect clearance to filed altitude/flight level ten (10) minutes after departure.

SPECIAL INSTRUCTIONS:

When using this departure, file the appropriate depicted departure fix and route. Aircraft landing/overflying Lansing (LAN) or overflying Flint (FNT) at 10,000 feet or below, file via EARVN. Aircraft landing Flint (FNT) at 10,000 feet or below, file via LAYNE. Aircraft landing/overflying Toledo (TOL) at 10,000 feet or below, file via RUZZL. Aircraft over HARWL must file FL220 and below. Prop aircraft departing Rwy 21L/R and 22L/R westbound cross DXO 3.5 DME at or above 2500 MSL. If unable advise ATC prior to departure. Jets use Departure Control Frequency 125.525. Props use Departure Control Frequency 118.95.

TAKE-OFF OBSTACLES

- Rwy 3R: Headwall 399' from DER, 566' right of centerline, 17' AGL/647' MSL.
- Rwy 4L: Multiple transmission towers 1516' from DER, 827' left of centerline, up to 60' AGL/690' MSL.  
Multiple antennas 2751' from DER, 762' right of centerline, up to 84' AGL/714' MSL.
- Rwy 4R: Antenna on building 3348' from DER, 1301' left of centerline, 100' AGL/736' MSL.
- Rwy 9L: Multiple trees 968' to 2519' from DER, 462' left of centerline and 1173' right of centerline, up to 85' AGL/715' MSL.
- Rwy 9R: Tree 1837' from DER, 947' right of centerline, 50' AGL/686' MSL.
- Rwy 21L: Multiple trees 1079' to 3910' from DER, 586' left of centerline and 1188' right of centerline, up to 100' AGL/733' MSL.
- Rwy 22L: Multiple trees 794' to 3694' from DER, 611' right of centerline and 1381' left of centerline, up to 110' AGL/740' MSL.
- Rwy 27R: Rod on ASR, 4461' from DER, 464' left of centerline, 106' AGL/756' MSL.

EC-1, 23 SEP 2010 to 21 OCT 2010

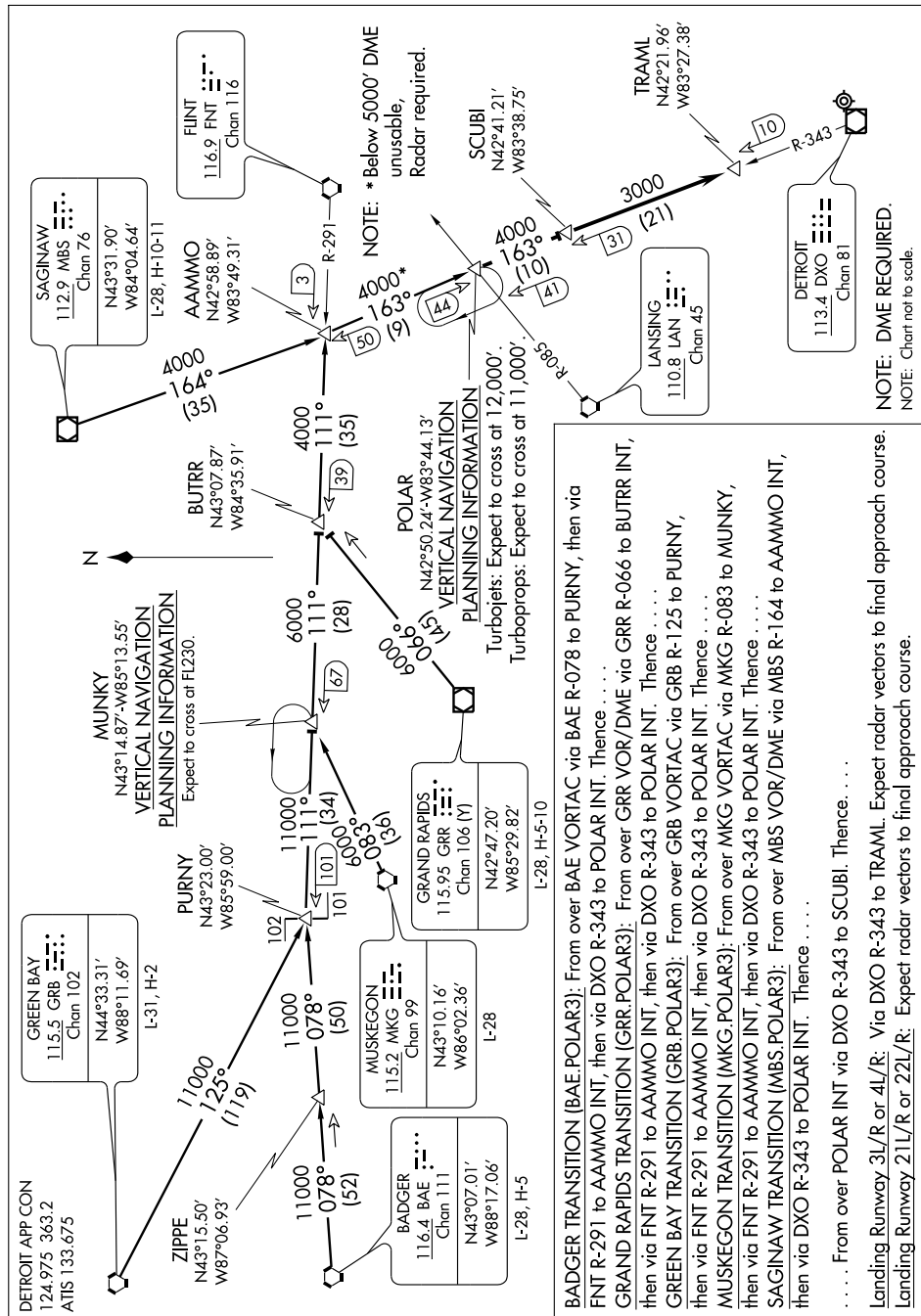
EC-1, 23 SEP 2010 to 21 OCT 2010

## POLAR THREE ARRIVAL

ST-119 (FAA)

DETROIT METROPOLITAN WAYNE COUNTY  
DETROIT, MICHIGAN

EC-1, 23 SEP 2010 to 21 OCT 2010



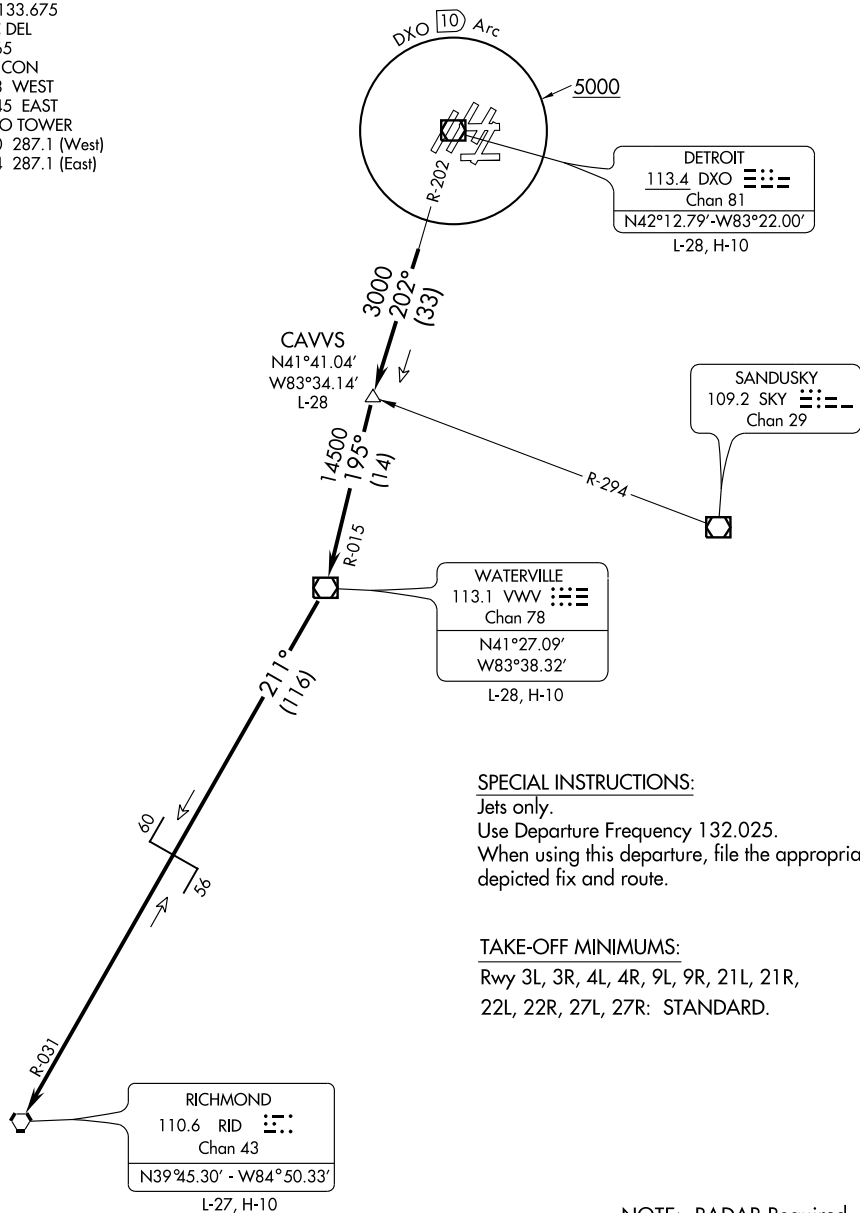
## POLAR THREE ARRIVAL

(POLAR.POLAR3) 09295

DETROIT, MICHIGAN  
DETROIT METROPOLITAN WAYNE COUNTY

EC-1, 23 SEP 2010 to 21 OCT 2010

ATIS 133.675  
 CLNC DEL  
 120.65  
 GND CON  
 121.8 WEST  
 119.45 EAST  
 METRO TOWER  
 135.0 287.1 (West)  
 118.4 287.1 (East)



(NARRATIVE ON FOLLOWING PAGE)



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF ALL RUNWAYS: Climb via assigned heading for radar vectors to intercept DXO VOR/DME R-202 to CAVVS INT/DXO 33 DME, then via VWV R-015 to VWV VOR/DME. Then right turn via VWV R-211 and RID R-031 to RID VORTAC. Maintain 10,000 feet, cross DXO 10 DME at or above 5,000 feet for noise abatement. If unable to comply, advise ATC prior to departure. Expect clearance to filed altitude/flight level ten (10) minutes after departure.

TAKE-OFF OBSTACLES:

- Rwy 3R: Headwall 399' from DER, 566' right of centerline, 17' AGL/647' MSL.
- Rwy 4L: Multiple transmission towers 1516' from DER, 827' left of centerline, up to 60' AGL/690' MSL.  
Multiple antennas 2751' from DER, 762' right of centerline, up to 84' AGL/714' MSL.
- Rwy 4R: Antenna on building 3348' from DER, 1301' left of centerline, 100' AGL/736' MSL.
- Rwy 9L: Multiple trees 968' to 2519' from DER, 462' left of centerline and 1173' right of centerline, up to 85' AGL/715' MSL.
- Rwy 9R: Tree 1837' from DER, 947' right of centerline, 50' AGL/686' MSL.
- Rwy 21L: Multiple trees 1079' to 3910' from DER, 586' left of centerline and 1188' right of centerline, up to 100' AGL/733' MSL.
- Rwy 22L: Multiple trees 794' to 3694' from DER, 611' right of centerline and 1381' left of centerline, up to 110' AGL/740' MSL.
- Rwy 27R: Rod on ASR, 4461' from DER, 464' left of centerline, 106' AGL/756' MSL.



WAAS CH <b>77520</b> <b>W04A</b>	APP CRS <b>035°</b>	Rwy Idg <b>10000</b> TDZE <b>645</b> Apt Elev <b>645</b>
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## RNAV (GPS) RWY 4L

DETROIT METROPOLITAN WAYNE COUNTY (DTW)

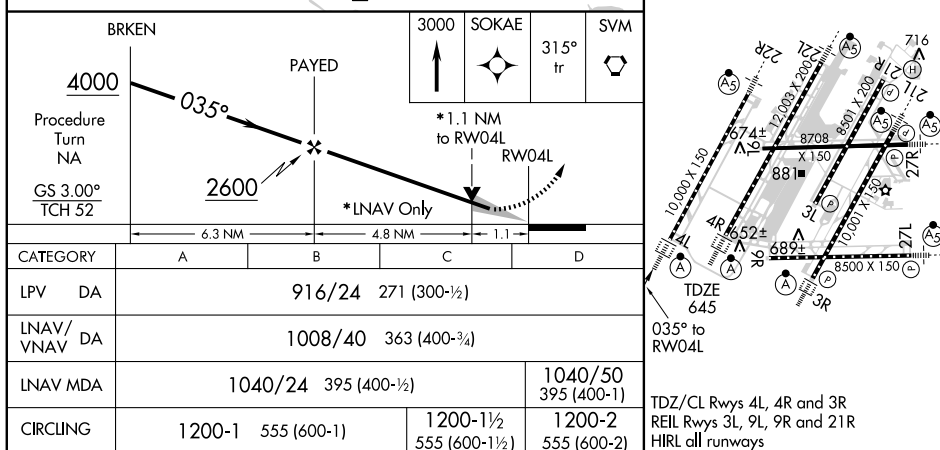
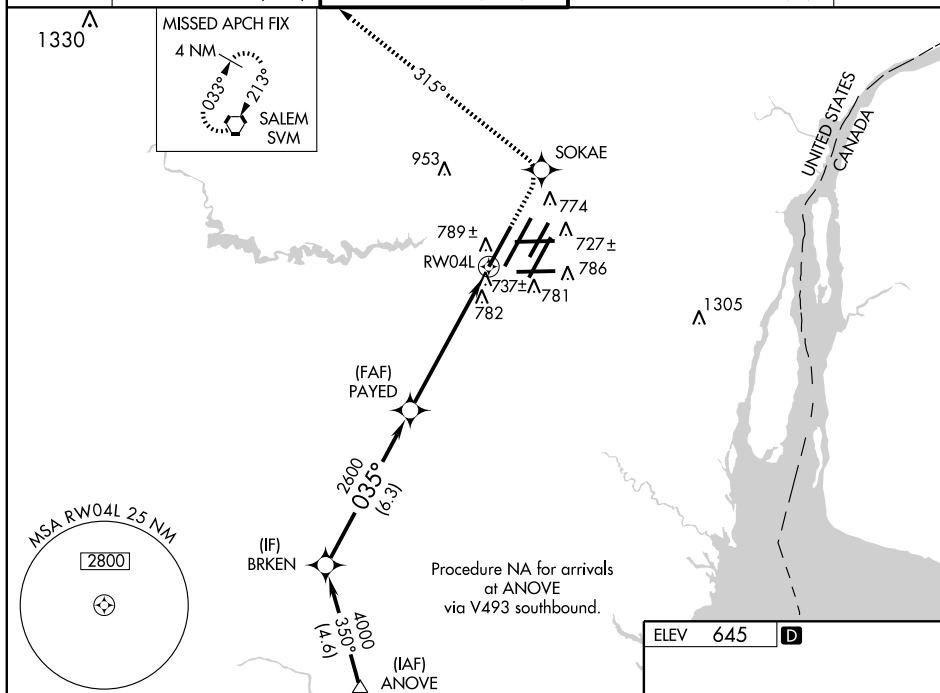
For inoperative ALSF-2, increase LPV all Cats visibility to RVR 5000, increase LNAV Cat D visibility to RVR 6000. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA.

ALSF-2



MISSED APPROACH: Climb to 3000 direct SOKAE and via 315° track to SVM VORTAC and hold.

ATIS <b>133.675</b>	DETROIT APP CON <b>124.05 363.2 (WEST)</b> <b>125.15 363.2 (EAST)</b>	METRO TOWER <b>135.0 287.1 (WEST)</b> <b>118.4 287.1 (EAST)</b>	GND CON <b>121.8 (NW) 119.45 (NE)</b> <b>123.72 (SW) 119.25 (SE)</b>	CLNC DEL <b>120.65</b>
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WAAS CH <b>63004</b> <b>W04A</b>	APP CRS <b>035°</b>	Rwy Idg <b>12003</b> TDZE <b>638</b> Apt Elev <b>645</b>
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## RNAV (GPS) RWY 4R

DETROIT METROPOLITAN WAYNE COUNTY (DTW)

For inoperative ALSF-2, increase LPV all Cats visibility to RVR 5000, increase RNAV Cat D visibility to RVR 6000. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above -47°C (116°F). DME/DME RNP-0.3 NA.

ALSF-2



MISSED APPROACH: Climb to 3000 direct CAVIB and via 043° track to MADDS and hold.

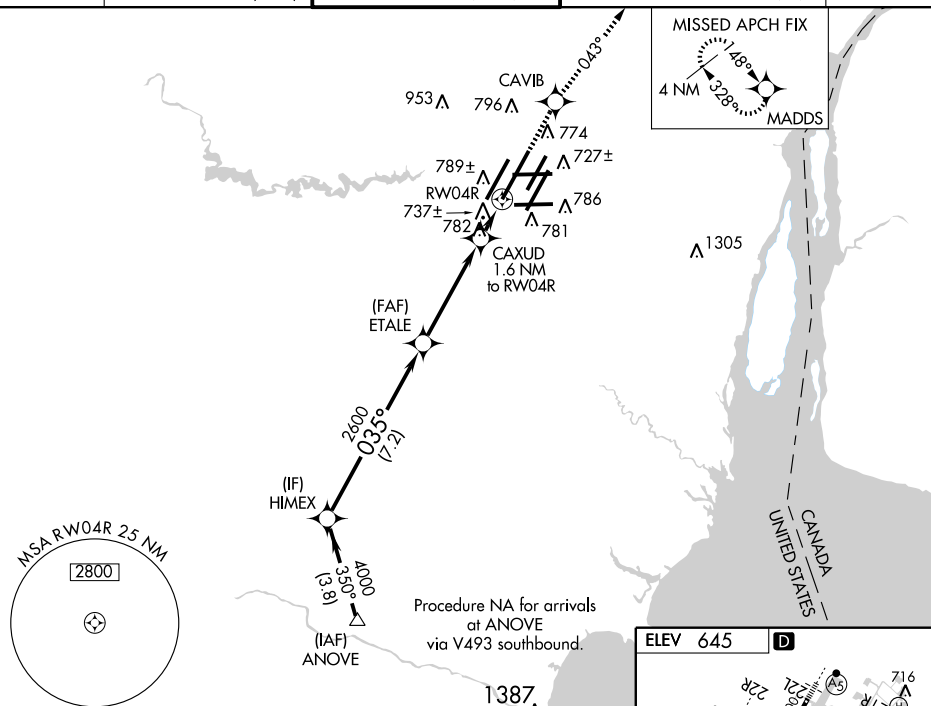
ATIS  
**133.675**

DETROIT APP CON  
**124.05 363.2 (WEST)**  
**125.15 363.2 (EAST)**

METRO TOWER  
**135.0 287.1 (WEST)**  
**118.4 287.1 (EAST)**

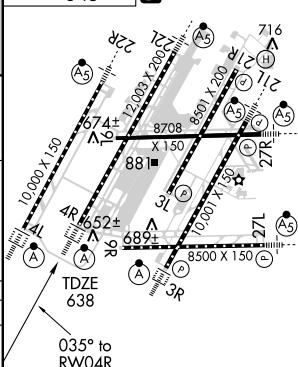
GND CON  
**121.8 (NW) 119.45 (NE)**  
**123.72 (SW) 119.25 (SE)**

CLNC DEL  
**120.65**



ELEV 645

D



TDZ/CL Rwy 4L, 4R and 3R  
REIL Rwy 3L, 9L, 9R and 21R  
HIRL all runways

	HIMEX	ETALE	3000	CAVIB	043° tr	MADDS
	4000	2600	*1200	*CAVIB 1.6 NM to RW04R	*LNAV only	
Procedure Turn NA	7.2 NM	4.3 NM	1.6 NM			
GS 3.00° TCH 54						
CATEGORY	A	B	C	D		
LPV DA		964/24	326 (400-½)			
LNAV/VNAV DA		1015/40	377 (400-¾)			
LNAV MDA	1060/24	422 (500-½)	1060/40 422 (500-¾)	1060/50 422 (500-1)		
CIRCLING	1200-1	555 (600-1)	1200-1½ 555 (600-1½)	1200-2 555 (600-2)		



WAAS CH <b>81820</b> <b>W21A</b>	APP CRS <b>215°</b>	Rwy Idg <b>10001</b> TDZE <b>632</b> Apt Elev <b>645</b>
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## RNAV (GPS) RWY 21L

DETROIT METROPOLITAN WAYNE COUNTY (DTW)

**▼** For inoperative MALSR increase LPV all Cnts visibility to RVR 5000.  
For uncompensated Baro-VNAV systems, LNAV/VNAV NA  
below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA.

MALSR



MISSED APPROACH: Climb to  
3000 direct CURMO and left turn via  
108° track to RYS NDB and hold.

 ATIS  
**133.675**

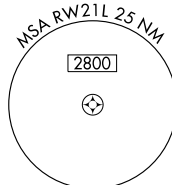
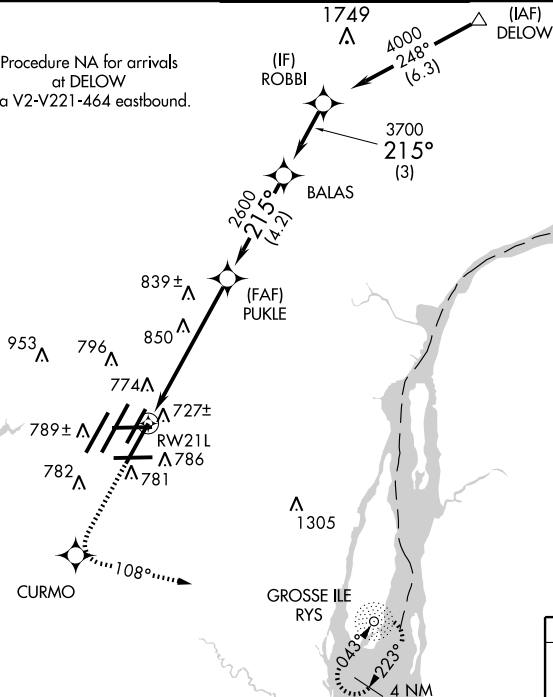
 DETROIT APP CON  
**124.05 363.2 (WEST)**  
**125.15 363.2 (EAST)**

 METRO TOWER  
**135.0 287.1 (WEST)**  
**118.4 287.1 (EAST)**

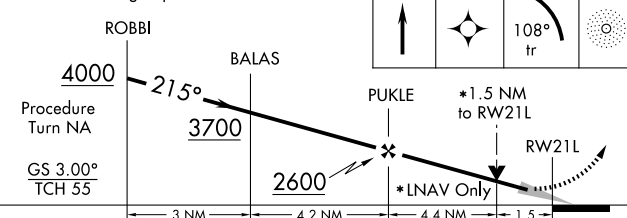
 GND CON  
**121.8 (NW) 119.45 (NE)**  
**123.72 (SW) 119.25 (SE)**

 CLNC DEL  
**120.65**

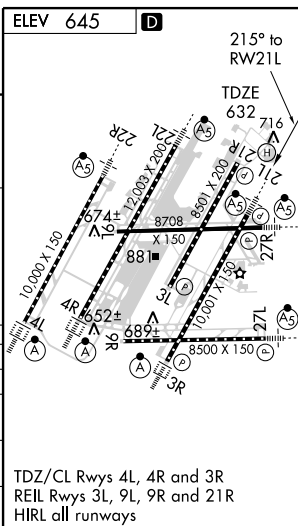
Procedure NA for arrivals  
at DELOW  
via V2-V221-464 eastbound.



VGSI and RNAV glidepath not coincident.



CATEGORY	A	B	C	D
LPV DA	922/24		290 (300-½)	
LNAV/VNAV DA	1118/60		486 (500-1¼)	
LNAV MDA	1180/24 548 (600-½)		1180/50 548 (600-1)	1180/60 548 (600-1¼)
CIRCLING	1200-1 555 (600-1)		1200-1½ 555 (600-1½)	1200-2 555 (600-2)





WAAS CH <b>82001</b> <b>W22B</b>	APP CRS <b>215°</b>	Rwy Idg <b>10000</b> TDZE <b>642</b> Apt Elev <b>645</b>
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# RNAV (GPS) RWY 22R

## DETROIT METROPOLITAN WAYNE COUNTY (DTW)

▼ For inoperative MALSR, increase LPV all Cnts visibility to RVR 5000.  
For uncompensated Baro-VNAV systems, LNAV/VNAV NA  
below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA.



MISSED APPROACH: Climb to 3000 direct  
PARNE and via 304° track to GICEY and  
via 353° track to SVM VORTAC and hold.

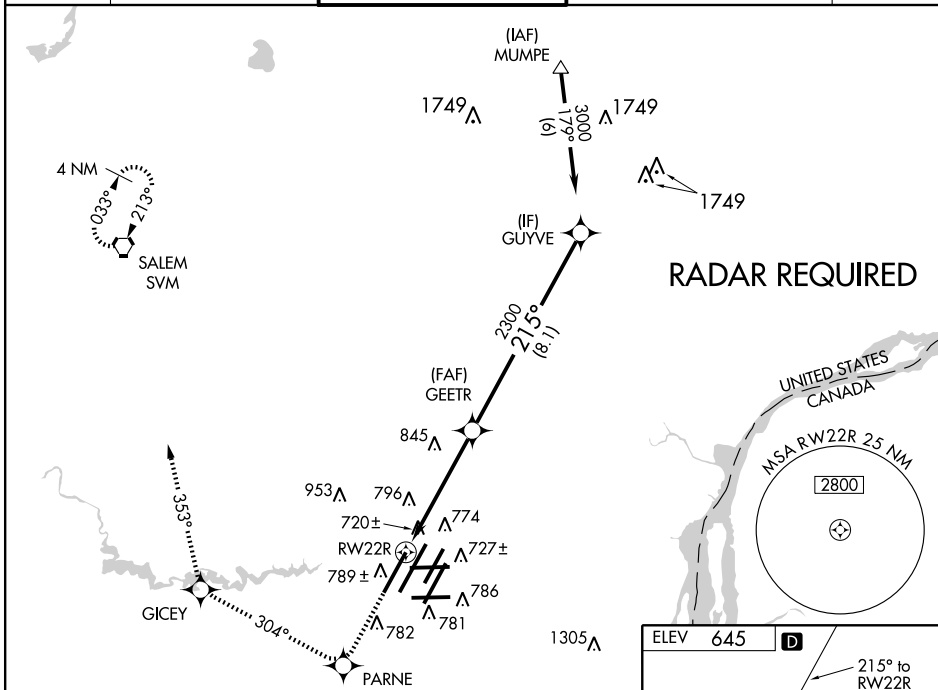
ATIS  
**133.675**

DETROIT APP CON  
**124.05 363.2** (WEST)  
**125.15 363.2** (EAST)

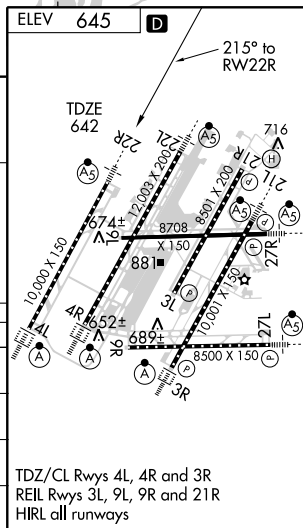
METRO TOWER  
**135.0 287.1** (WEST)  
**118.4 287.1** (EAST)

GND CON  
**121.8** (NW) **119.45** (NE)  
**123.72** (SW) **119.25** (SE)

CLNC DEL  
**120.65**



GUYVE		3000		PARNE		GICEY		SVM	
GS 3.00° TCH 55		215°		304° tr		353° tr			
GEETR		*1.5 NM to RW22R		RW22R					
* LNAV only									
8.1 NM		3.5 NM		1.5 NM					
CATEGORY	A	B	C	D					
LPV DA	892/24 250 (300-½)								
LNAV/ VNAV DA	1006/40 364 (400-¾)								
LNAV MDA	1160/24	518 (600-½)	1160/50 518 (600-1)	1160/60 518 (600-1¼)					
CIRCLING	1200-1	555 (600-1)	1200-1½ 555 (600-1½)	1200-2 555 (600-2)					



WAAS CH <b>53300</b> <b>W27B</b>	APP CRS <b>275°</b>	Rwy Idg TDZE <b>630</b> Apt Elev <b>645</b>
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## RNAV (GPS) RWY 27L

DETROIT METROPOLITAN WAYNE COUNTY (DTW)

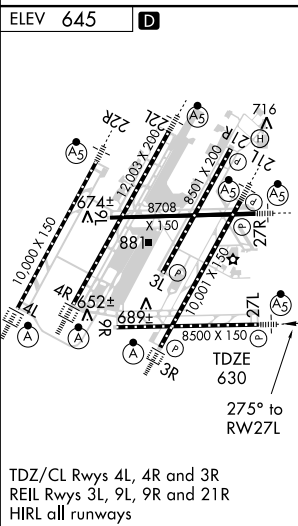
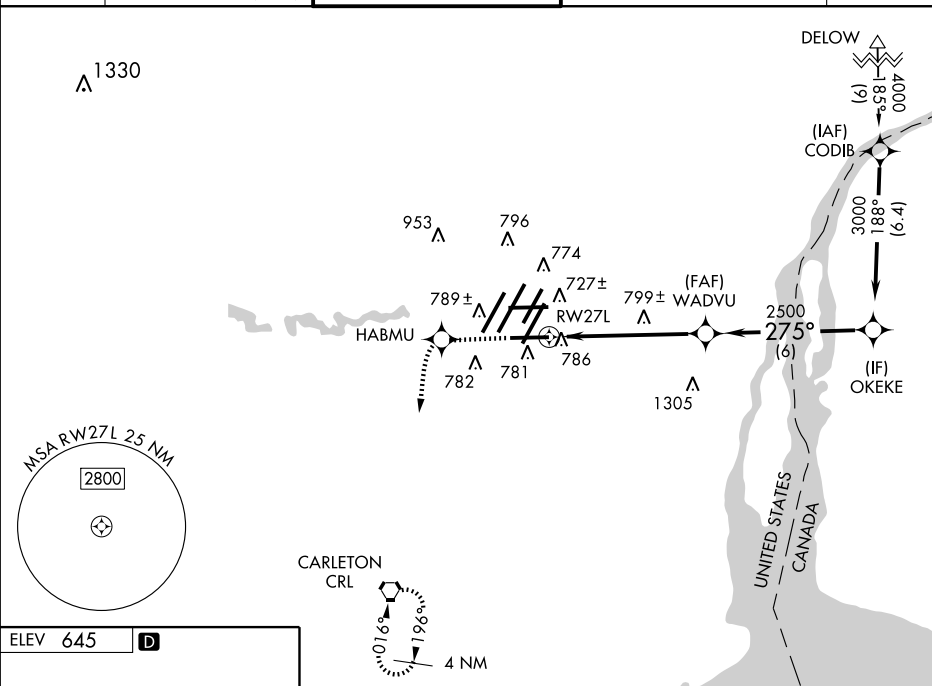
**T** For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (117°F). DME/DME RNP-0.3 NA.  
For inoperative MALSR increase LPV visibility to RVR 5000 all Cats.



MALSR



MISSED APPROACH: Climb to 3000  
direct HABMU and via 198° track to  
CRL VORTAC and hold.

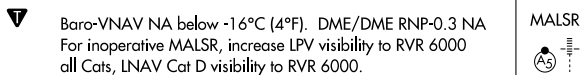
ATIS <b>133.675</b>	DETROIT APP CON <b>124.05 363.2</b> (WEST) <b>125.15 363.2</b> (EAST)	METRO TOWER <b>135.0 287.1</b> (WEST) <b>118.4 287.1</b> (EAST)	GND CON <b>121.8</b> (NW) <b>119.45</b> (NE) <b>123.72</b> (SW) <b>119.25</b> (SE)	CLNC DEL <b>120.65</b>
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3000	HABMU	CRL				
↑						
	tr 198°					

WAAS CH <b>86220</b> <b>W27A</b>	APP CRS <b>275°</b>	Rwy Idg <b>8708</b> TDZE <b>635</b> Apt Elev <b>645</b>
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RNAV (GPS) RWY 27R  
DETROIT METROPOLITAN WAYNE COUNTY (DTW)



**MISSED APPROACH:** Climb to 3000  
direct FELON and via 330° track to  
SVM VORTAC and hold.

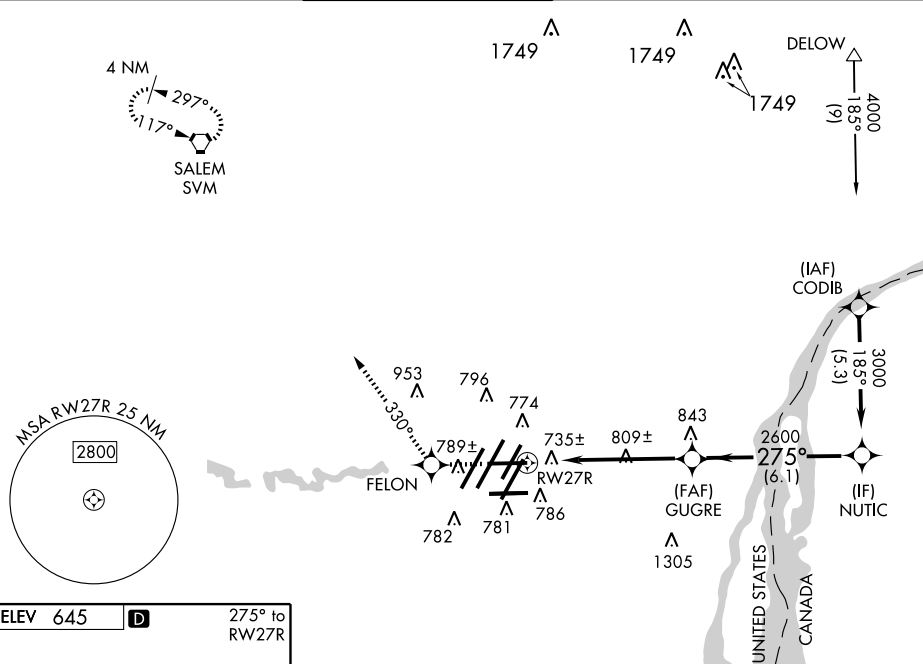
ATIS  
133.675

DETROIT APP CON  
124.05 363.2 (WEST)  
125.15 363.2 (EAST)

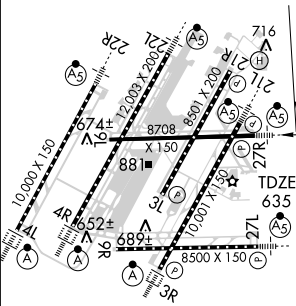
METRO TOWER  
135.0 287.1 (WEST)  
118.4 287.1 (EAST)

GND CON

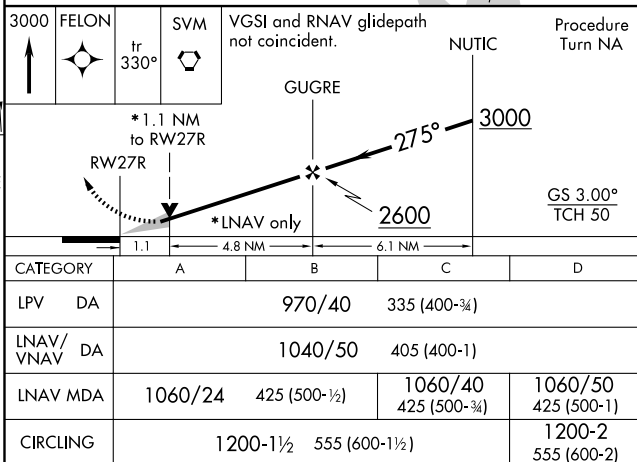
121.8 (NW)	119.45 (NE)
123.72 (SW)	119.25 (SE)

CLNC DEL  
**120.65**

ELEV 645	<b>D</b>	275° to RW27R
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TDZ/CL Rwy 4L, 4R and 3R  
REIL Rwy 3L, 9L, 9R and 21R  
HIRL all runways



DETROIT, MICHIGAN  
Amdt 1 10266

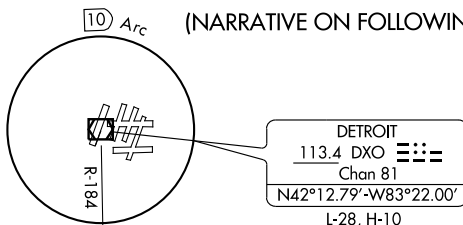
DETROIT METROPOLITAN WAYNE COUNTY (DTW)  
42°13'N - 83°21'W **RNAV (GPS) RWY 27R**

EC-1. 23 SEP 2010 to 21 OCT 2010

## ROSEWOOD TWO DEPARTURE

ATIS 133.675  
CLNC DEL  
120.65  
GND CON  
121.8 WEST  
119.45 EAST  
METRO TOWER  
135.0 287.1 (West)  
118.4 287.1 (East)

(NARRATIVE ON FOLLOWING PAGE)



3100  
184°

SCORR  
N41°40.31'  
W83°20.49'

CHOOT  
N41°31.54'  
W83°20.09'

SANDUSKY  
109.2 SKY  
Chan 29

R-299

R-284

R-031

FINDLAY  
108.2 FDY  
Chan 19

6500  
208°  
(81)

SPECIAL INSTRUCTIONS:

When using this departure file appropriate fix and route.

Jets use Departure Control Frequency 132.025.

Props use Departure Control Frequency 134.3.

TAKE-OFF MINIMUMS:

Rwys 3L, 3R, 4L, 4R, 9L, 9R, 21L, 21R,  
22L, 22R, 27L, 27R: STANDARD.

R-028

ROSEWOOD  
117.5 ROD  
Chan 122  
N40°17.27'  
W84°02.59'  
L-27, H-10

NOTE: Chart not to scale.

NOTE: RADAR Required.

## ROSEWOOD TWO DEPARTURE



## DEPARTURE ROUTE DESCRIPTION

TAKE-OFF ALL RUNWAYS: Climb via assigned heading for radar vectors to intercept DXO VOR/DME R-184 to CHOOT INT/DXO 41 DME (MEA 3100), then right turn to via ROD R-028 to ROD VORTAC (MEA 6500).

Jets maintain 10,000 feet, cross DXO VOR/DME 10 DME at or above 5,000 feet for noise abatement. If unable to comply, advise ATC prior to departure. Props maintain 4,000 feet or lower assigned altitude. Expect clearance to filed altitude/flight level 10 minutes after departure.

TAKE-OFF OBSTACLES

Rwy 3R: Headwall 399' from DER, 566' right of centerline, 17' AGL/647' MSL.

Rwy 4L: Multiple transmission towers 1516' from DER, 827' left of centerline, up to 60' AGL/690' MSL.  
Multiple antennas 2751' from DER, 762' right of centerline, up to 84' AGL/714' MSL.

Rwy 4R: Antenna on building 3348' from DER, 1301' left of centerline, 100' AGL/736' MSL.

Rwy 9L: Multiple trees 968' to 2519' from DER, 462' left of centerline and 1173' right of centerline, up to 85' AGL/715' MSL.

Rwy 9R: Tree 1837' from DER, 947' right of centerline, 50' AGL/686' MSL.

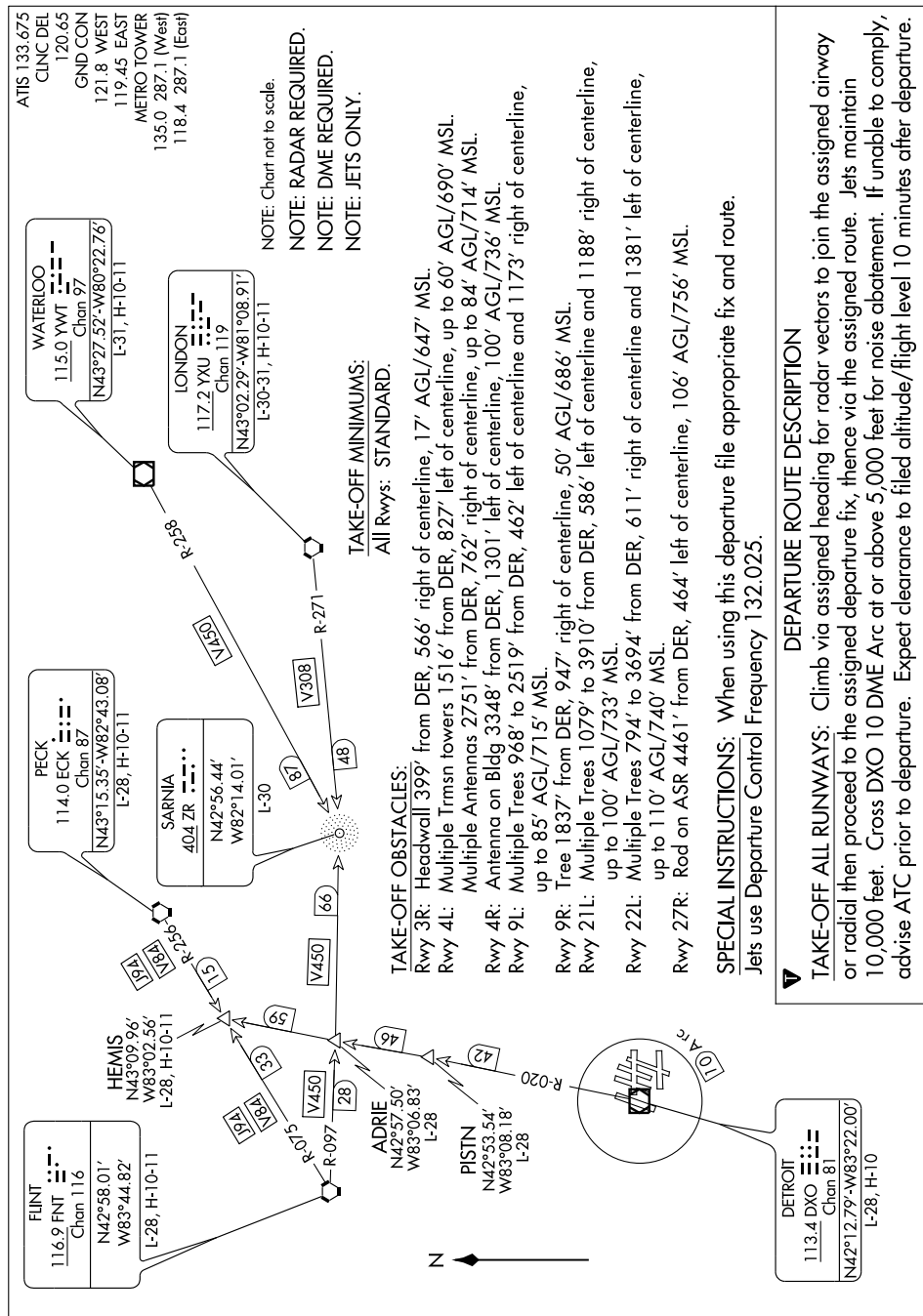
Rwy 21L: Multiple trees 1079' to 3910' from DER, 586' left of centerline and 1188' right of centerline, up to 100' AGL/733' MSL.

Rwy 22L: Multiple trees 794' to 3694' from DER, 611' right of centerline and 1381' left of centerline, up to 110' AGL/740' MSL.

Rwy 27R: Rod on ASR 4461' from DER, 464' left of centerline, 106' AGL/756' MSL.





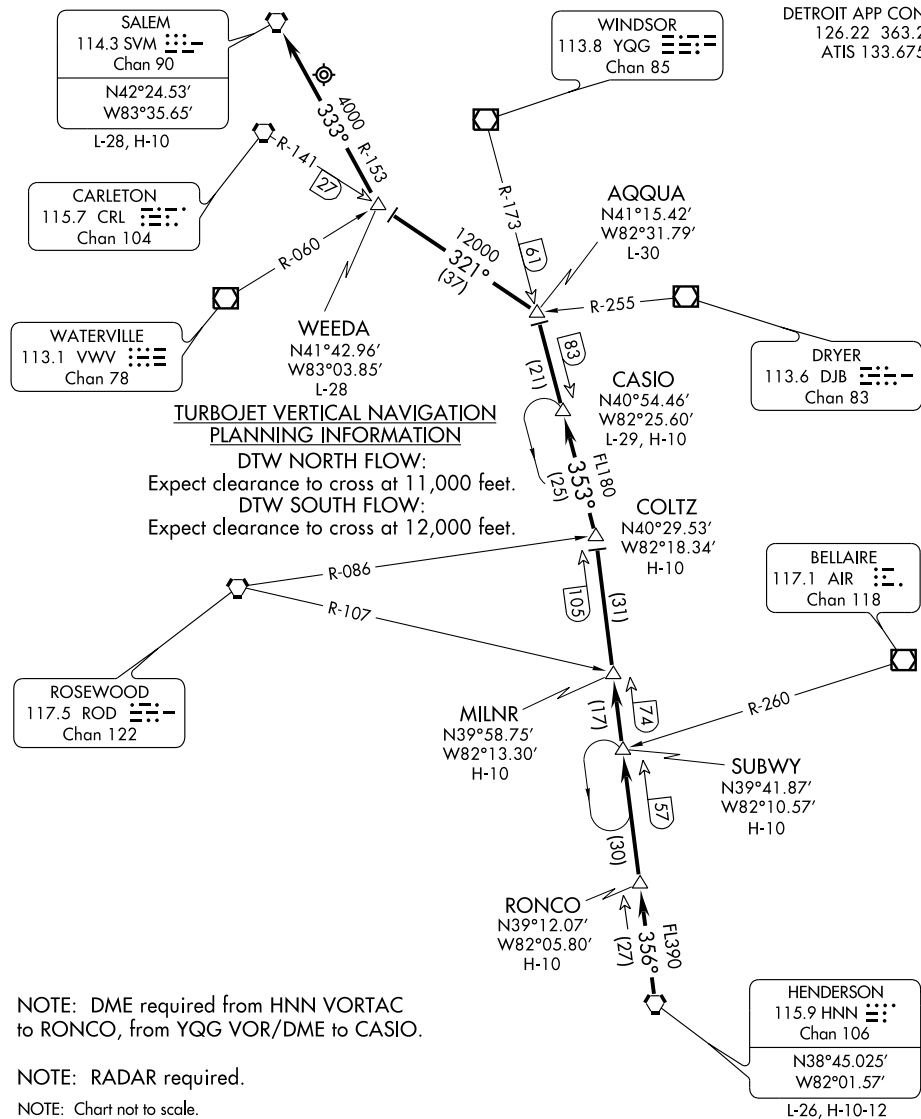


## WEEDA ONE ARRIVAL

ST-119 (FAA)

DETROIT METROPOLITAN WAYNE COUNTY

DETROIT, MICHIGAN

DETROIT APP CON  
126.22 363.2  
ATIS 133.675

## ARRIVAL ROUTE DESCRIPTION

From over HNN VORTAC via R-356 to COLTZ INT (MEA FL390), then via YQG R-173 to AQQUA INT (MEA FL180), then via CRL R-141 TO WEEDA INT (MEA 12000) then via SVM R-153 TO SVM VORTAC (MEA 4000). Expect radar vectors to final approach course.

## WEEDA ONE ARRIVAL

DETROIT, MICHIGAN

DETROIT METROPOLITAN WAYNE COUNTY

## AIRPORT DIAGRAM

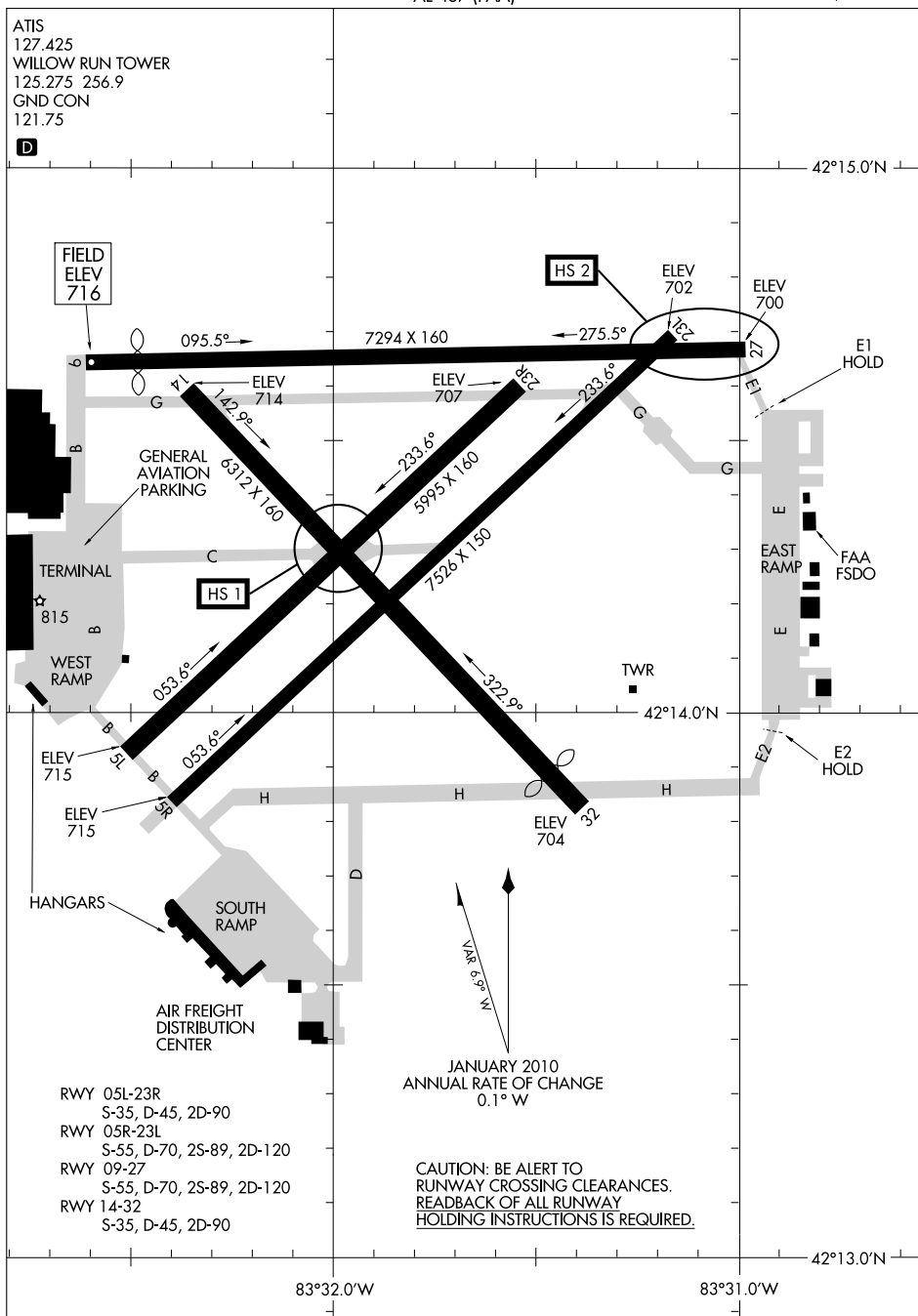
AL-467 (FAA)

DETROIT/WILLOW RUN (YIP)  
DETROIT, MICHIGAN

ATIS  
127.425  
WILLOW RUN TOWER  
125.275 256.9  
GND CON  
121.75

D

EC-1, 23 SEP 2010 to 21 OCT 2010



EC-1, 23 SEP 2010 to 21 OCT 2010

## AIRPORT DIAGRAM

DETROIT, MICHIGAN  
DETROIT/WILLOW RUN (YIP)

## CONTINUED FROM PRECEDING PAGE

## RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

CARLETON (H) VORTAC 115.7 CRL Chan 104 N42°02.88' W83°27.45' 028° 10.9 NM to fld.  
629/3W. HIWAS.

(H) VORW/DME 113.4 DXO Chan 81 N42°12.79' W83°22.00' at fld. 638/6W. NOTAM FILE DTW.  
DME unusable byd 30 NM below 2900'.

REVUP NDB (LOM) 388 DT N42°07.21' W83°25.90' 038° 6.6 NM to fld. Unmonitored. SHUTDOWN.

SPENC NDB (LOM) 223 DM N42°13.20' W83°12.20' 272° 6.7 NM to fld.

ILS/DME 111.95 I-HJT Chan 56Y Rwy 04L. Class IIE. DME also serves Rwy 22R.

ILS/DME 110.7 I-DTW Chan 44 Rwy 04R. LOM REVUP NDB. OM unmonitored. LOM SHUTDOWN.

ILS/DME 110.7 I-DWC Chan 44 Rwy 22L. Class IE.

ILS/DME 111.95 I-JKI Chan 56Y Rwy 22R. Class IE. DME also serves Rwy 04R.

ILS/DME 111.5 I-HUU Chan 52 Rwy 03R.

ILS/DME 111.5 I-EJR Chan 52 Rwy 21L.

ILS 108.5 I-DMI Rwy 27R. LOM SPENC NDB.

ILS 110.15 I-EPA Rwy 27L. Class IE.

COMM/NAV/WEATHER REMARKS: Dual VHF communications required for Simultaneous Close Parallel ILS PRM Approaches. Rwy 04L and Rwy 22R Monitor 127.05, Rwy 04R and Rwy 22L Monitor 135.775 and Rwy 03R and Rwy 21L Monitor 128.35.

**WILLOW RUN** (YIP) 24 SW UTC-5(-4DT) N42°14.36' W83°31.86'

716 B S4 FUEL 100LL, JET A OX 1, 3 LRA ARFF Index—See Remarks NOTAM FILE YIP **DETROIT COPTER**

RWY 05R-23L: H7526X150 (ASPH) S-55, D-70, 2S-89, 2D-120 MIRL

H-10G, L-28J, A  
IAP, AD

RWY 05R: MALSR. Tree.

RWY 23L: MALSR. VASI(V4L)—GA 3.0° TCH 56'.

RWY 09-27: H7294X160 (ASPH-GRVD) S-55, D-70, 2S-89,  
2D-120 MIRL

RWY 09: Thld dispd 574'. Railroad.

RWY 14-32: H6312X160 (ASPH-GRVD) S-35, D-45, 2D-90 MIRL

RWY 14: Antenna.

RWY 32: REIL. PAPI(P4L)—GA 3.5° TCH 45'. Thld dispd 525'.  
Ground.

RWY 05L-23R: H5995X160 (ASPH-GRVD) S-35, D-45, 2D-90  
MIRL

RWY 05L: Trees. RWY 23R: Trees.

## RUNWAY DECLARED DISTANCE INFORMATION

RWY 05L: TORA-5995 TODA-5995 ASDA-5995 LDA-5995

RWY 23R: TORA-5995 TODA-5995 ASDA-5995 LDA-5995

**AIRPORT REMARKS:** Attended continuously. Helicopter tkr and ldg on the south ramp prohibited, taxi only. Birds on and in/ovf arpt. Rwy 09-27, only the 80' center portion is grvd. Class IV, ARFF Index A. ARFF Index E svc avbl on req call 734-485-6660. 48 hr PPR for unscheduled air carrier ops with more than 30 passenger seats requiring Index C or greater call arpt manager 734-485-6670. Flight Notification Service (ADCUS) avbl call 734-942-9000. Customs avbl 24 hrs, Mon-Fri and on call from Detroit Metropolitan Wayne Co arpt on weekend. U.S. customs user fee arpt. All billing thru Wayne Co. Arpt Authority; For customs clearance 1 hr minimum advance notification rqr. Pilots must ctc U.S. customs on 313-226-3140. Req for customs svc by FAA flight plan is not accepted. Ldg fee. Ldg fee is based on acft gross weight.

**WEATHER DATA SOURCES:** ASOS 132.350 (734) 485-9056. LAWRS.

**COMMUNICATIONS:** ATIS 127.425 (734) 482-6590

**(R) DETROIT APP/DEP CON** 118.95

TOWER 125.275 GND CON 121.75

## RADIO AIDS TO NAVIGATION: NOTAM FILE DTW.

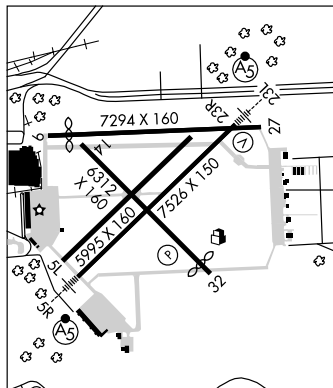
DETROIT (H) VORW/DME 113.4 DXO Chan 81 N42°12.79' W83°22.00' 288° 7.5 NM to fld. 638/6W.

YIPPS NDB (LOM) 359 YI N42°10.45' W83°37.29' 052° 5.6 NM to fld. Unmonitored.

ILS/DME 109.5 I-YIP Chan 32 Rwy 05R. Class IE. LOM YIPPS NDB.

ILS/DME 109.5 I-LSW Chan 32 Rwy 23L. Class IE.

COMM/NAV/WEATHER REMARKS: Emerg frequencies not avbl at twr.



## AKRON TWO DEPARTURE

SL-467 (FAA)

DETROIT/WILLOW RUN (YIP)  
DETROIT, MICHIGAN

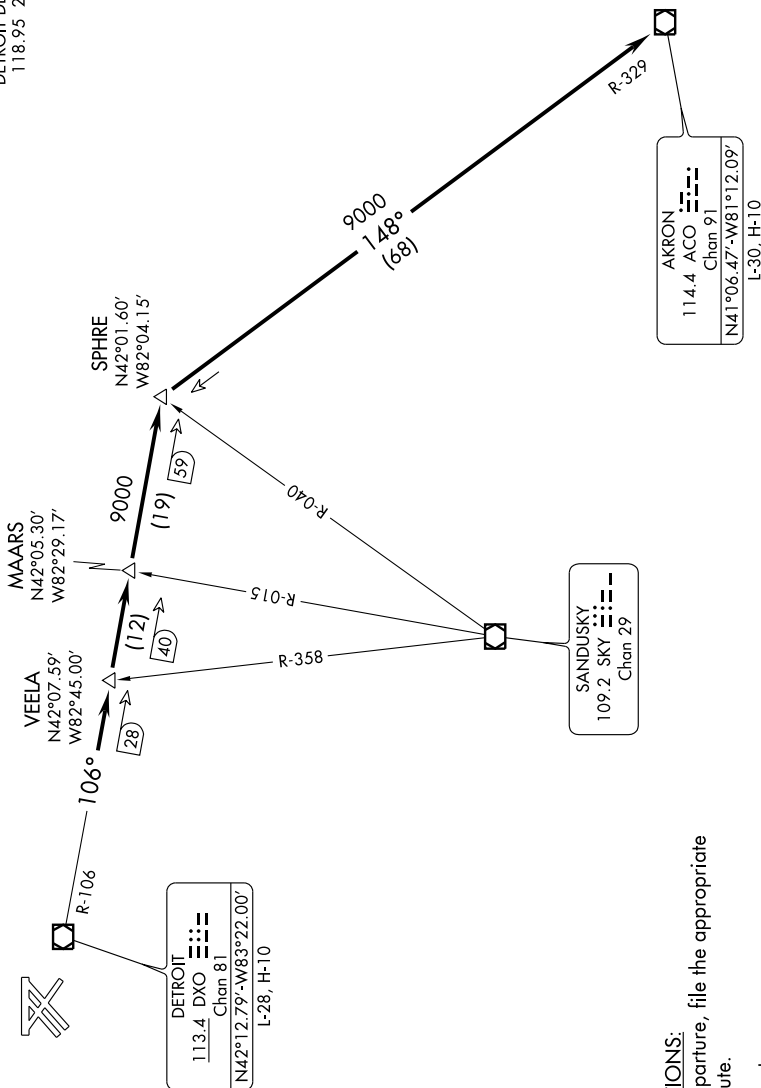
EC-1, 23 SEP 2010 to 21 OCT 2010

## TAKE-OFF MINIMUMS

Rwys 5L, 5R, 9, 14, 23L, 23R, 32: Standard.

Rwy 27: 200-1½ or Standard with minimum climb of 206 feet per NM to 1000.

ATIS 127.425  
GND CON 121.75  
WILLOW RUN TOWER 125.275 256.9  
DETROIT DEP CON 118.95 239.275



## SPECIAL INSTRUCTIONS:

When using this departure, file the appropriate depicted fix and route.

NOTE: Radar Required.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

EC-1, 23 SEP 2010 to 21 OCT 2010

## AKRON TWO DEPARTURE

(ACO2.ACO) 10154

DETROIT, MICHIGAN  
DETROIT/WILLOW RUN (YIP)



## DEPARTURE ROUTE DESCRIPTION

TAKE-OFF ALL RUNWAYS: Climb via assigned heading for radar vectors, thence. . . .

. . . .to intercept DXO VOR/DME R-106 to SPHRE INT, then via ACO R-329 to ACO VOR/DME. Maintain 3000 feet, expect clearance to filed altitude/flight level ten (10) minutes after departure.

TAKE-OFF OBSTACLES

Rwy 5L: Multiple Trees beginning 1438' to 2887' from DER, from 119' to 438' left of centerline, up to 79' AGL/785' MSL.

Rwy 5R: Multiple Trees beginning 1877' to 2472' from DER, from 134' to 922' left and right of centerline, up to 78' AGL/777' MSL.

Rwy 9R: Multiple Trees beginning 827' to 2598' from DER, from 432' to 600' left and right of centerline, up to 77' AGL/780' MSL.

Rwy 23L: Tree 1304' from DER, 438' right of centerline, 42' AGL/757' MSL.  
Tree 2457' from DER, 720' left of centerline, 66' AGL/781' MSL.

Rwy 23R: Multiple trees and road with vehicle beginning 587' to 1333' from DER, from 282' to 814' left and right of centerline, up to 77' AGL/793' MSL.

Rwy 27L: Multiple Trees and Pole beginning 1273' to 2024' from DER, from 47' to 769' left and right of centerline, up to 90' AGL/805' MSL.

Rwy 27: Railroad and Lights beginning 564' to 1565' from DER, from 4' to 333' left of centerline, up to 54' AGL/770' MSL.  
Tree and Lights beginning 102' to 1257' from DER, from 10' to 485' right of centerline, up to 55' AGL/771' MSL.  
Tower 7161' from DER, 502' left of centerline, 162' AGL/900' MSL.

Rwy 32: Multiple Trees and Poles beginning 701' to 1884' from DER, from 78' to 750' left of centerline, up to 84' AGL/798' MSL.  
Multiple Trees 1157' to 1893' from DER, from 126' to 475' right of centerline, up to 66' AGL/780' MSL.

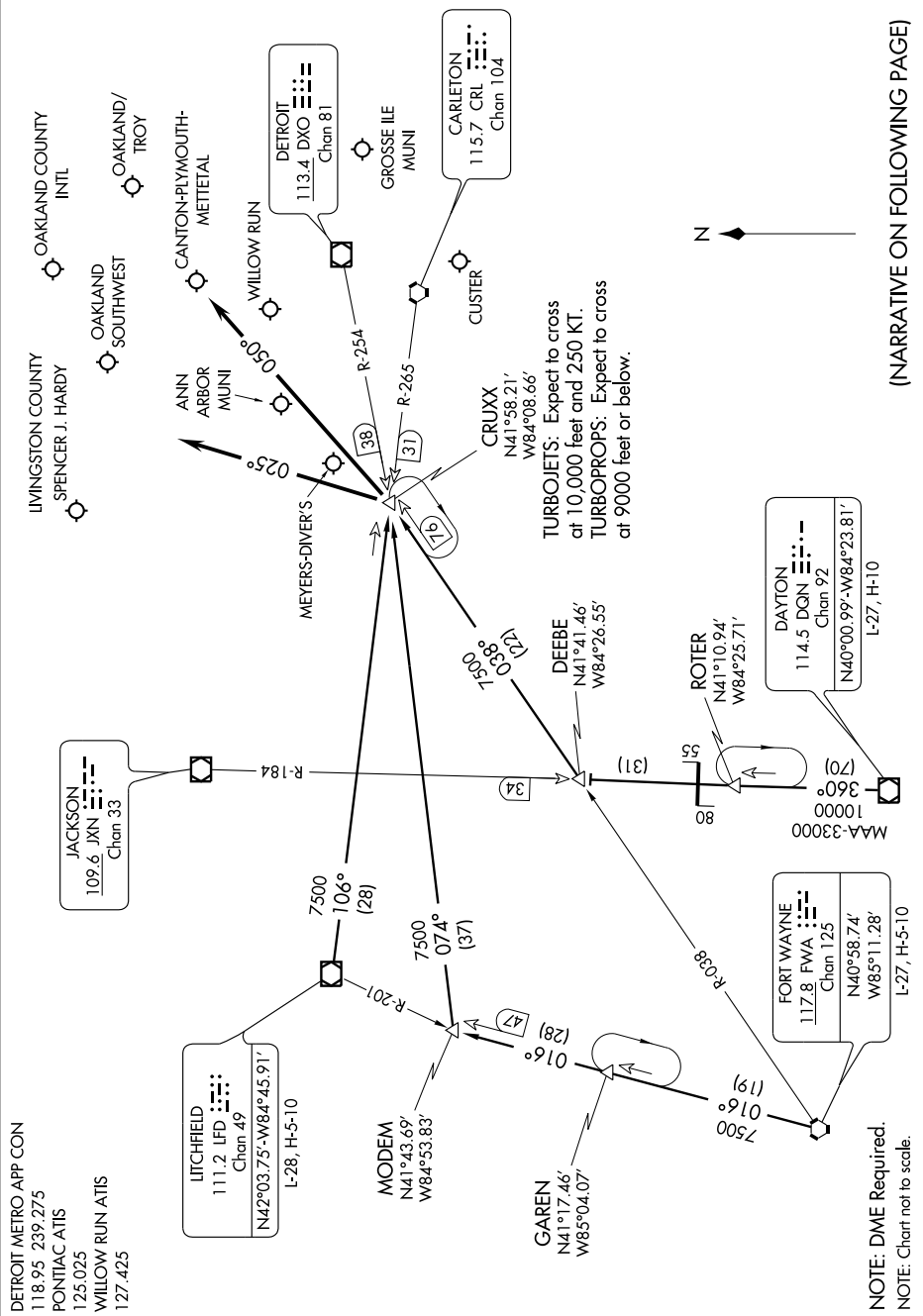
EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010

## CRUXX FOUR ARRIVAL

DETROIT, MICHIGAN

EC-1, 23 SEP 2010 to 21 OCT 2010



## CRUXX FOUR ARRIVAL

(CRUXX.CRUXX4) 10210

DETROIT, MICHIGAN

EC-1, 23 SEP 2010 to 21 OCT 2010

## CRUXX FOUR ARRIVAL (CRUXX.CRUX4)

DETROIT, MICHIGAN

## ARRIVAL DESCRIPTION

DAYTON TRANSITION (DQN.CRUX4): From over DQN VOR/DME via DQN R-360 and JXN R-184 to DEEBE INT and FWA R-038 to CRUXX INT. Thence . . . .

FORT WAYNE TRANSITION (FWA.CRUX4): From over FWA VORTAC via FWA R-016 to MODEM INT and DXO R-254 to CRUXX INT. Thence . . . .

LITCHFIELD TRANSITION (LFD.CRUX4): From over LFD VORTAC via LFD R-106 to CRUXX INT. Thence . . . .

. . . . Aircraft landing Y47, PTK, 0MI7, ØZW, ONZ, 1D2, TTF, VLL: From over CRUXX INT via 025° heading.

. . . . Aircraft landing YIP or ARB: From over CRUXX INT via 050° heading. Expect radar vector to final approach course.

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010







DEPARTURE ROUTE DESCRIPTION

TAKE-OFF ALL RUNWAYS: Climb via assigned heading for radar vectors to join the assigned SID. Maintain 3000 feet, expect clearance to filed altitude/flight level ten (10) minutes after departure.

CHARDON TRANSITION (ERRTH2.CXR): From over ERRTH INT via CXR R-325 to CXR VOR/DME.

KEATING TRANSITION (ERRTH2.ETG): From over ERRTH INT via CXR R-325 to CXR VOR/DME, then via CXR R-102 and ETG R-289 to MIGET INT, then via ETG R-289 to ETG VORTAC.

SLATE RUN TRANSITION (ERRTH2.SLT): (DME Required) From over ERRTH INT via YQG R-101 to TRACE INT, then via ECK R-139 to DORET INT, then via SLT R-287 to SLT VORTAC.

TAKE-OFF OBSTACLES:

- Rwy 5L: Multiple trees beginning 1438' to 2887' from DER, from 119' to 438' left of centerline, up to 79' AGL/785' MSL.
- Rwy 5R: Multiple trees beginning 1877' to 2472' from DER, from 134' to 922' left and right of centerline, up to 78' AGL/777' MSL.
- Rwy 9R: Multiple trees beginning 827' to 2598' from DER, from 432' to 600' left and right of centerline, up to 77' AGL/780' MSL.
- Rwy 23L Tree 1304' from DER, 438' right of centerline, 42' AGL/757' MSL.  
Tree 2457' from DER, 720' left of centerline, 66' AGL/781' MSL.
- Rwy 23R: Multiple trees and road with vehicle beginning 587' to 1333' from DER, from 282' to 814' left and right of centerline, up to 77' AGL/793' MSL.
- Rwy 27L: Multiple trees and pole beginning 1273' to 2024' from DER, from 47' to 769' left and right of centerline, up to 90' AGL/805' MSL.
- Rwy 27: Railroad and lights beginning 564' to 1565' from DER, from 4' to 333' left of centerline, up to 54' AGL/770' MSL. Tree and lights beginning 102' to 1257' from DER, from 10' to 485' right of centerline, up to 55' AGL/771' MSL. Tower 7161' from DER, 502' left of centerline, 162' AGL/900' MSL.
- Rwy 32: Multiple trees and poles beginning 701' to 1884' from DER, from 78' to 750' left of centerline, up to 84' AGL/798' MSL. Multiple trees 1157' to 1893' from DER, from 126' to 475' right of centerline, up to 66' AGL/780' MSL.

## FORT WAYNE THREE DEPARTURE

SL-467 (FAA)

DETROIT/ WILLOW RUN (YIP)  
DETROIT, MICHIGAN

ATIS 127.425  
GND CON  
121.75  
WILLOW RUN TOWER  
125.275 256.9  
DETROIT DEP CON  
118.95 239.275

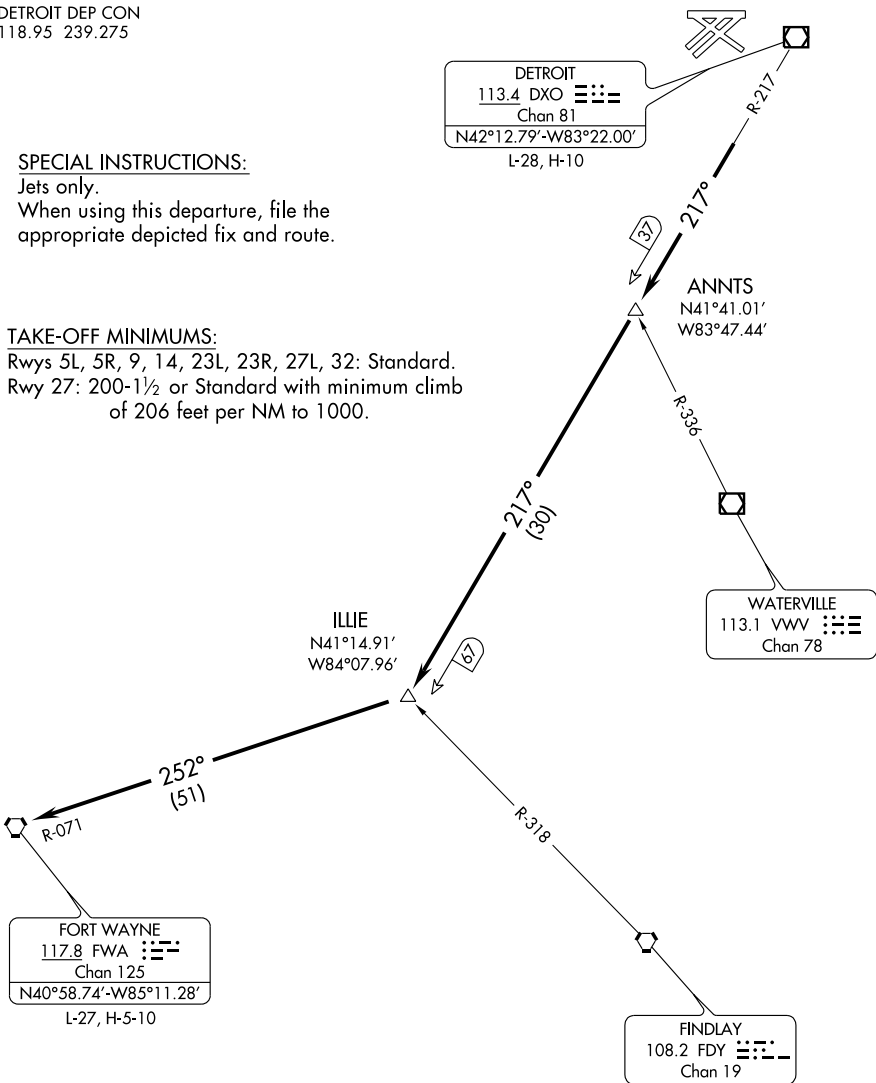
SPECIAL INSTRUCTIONS:

Jets only.

When using this departure, file the appropriate depicted fix and route.

TAKE-OFF MINIMUMS:

Rwys 5L, 5R, 9, 14, 23L, 23R, 27L, 32: Standard.  
Rwy 27: 200-1½ or Standard with minimum climb  
of 206 feet per NM to 1000.



NOTE: RADAR Required.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

## FORT WAYNE THREE DEPARTURE

(FWA3.FWA) 10154

DETROIT, MICHIGAN  
DETROIT/ WILLOW RUN (YIP)



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF ALL RUNWAYS: Climb via assigned heading for radar vectors, thence. . . .

. . . .to intercept DXO VOR/DME R-217 to ILLIE INT, then via FWA R-071 to FWA VORTAC. Maintain 3000, expect clearance to filed flight level ten (10) minutes after departure.

TAKE-OFF OBSTACLES:

Rwy 5L: Multiple trees beginning 1438' to 2887' from DER, from 119' to 438' left of centerline, up to 79' AGL/785' MSL.

Rwy 5R: Multiple trees beginning 1877' to 2472' from DER, from 134' to 922' left and right of centerline, up to 78' AGL/777' MSL.

Rwy 9R: Multiple trees beginning 827' to 2598' from DER, from 432' to 600' left and right of centerline, up to 77' AGL/780' MSL.

Rwy 23L: Tree 1304' from DER, 438' right of centerline, 42' AGL/757' MSL.  
Tree 2457' from DER, 720' left of centerline, 66' AGL/781' MSL.

Rwy 23R: Multiple trees and road beginning 587' to 1333' from DER, from 282' to 814' left and right of centerline, up to 77' AGL/793' MSL.

Rwy 27L: Multiple trees and pole beginning 1273' to 2024' from DER, from 47' to 769' left and right of centerline, up to 90' AGL/805' MSL.

Rwy 27: Railroad and lights beginning 564' to 1565' from DER, from 4' to 333' left of centerline, up to 54' AGL/770' MSL.  
Tree and lights beginning 102' to 1257' from DER, from 10' to 485' right of centerline, up to 55' AGL/771' MSL.  
Tower 7161' from DER, 502' left of centerline, 162' AGL/900' MSL.

Rwy 32: Multiple trees and poles beginning 701' to 1884' from DER, from 78' to 750' left of centerline, up to 84' AGL/798' MSL.  
Multiple trees 1157' to 1893' from DER, from 126' to 475' right of centerline, up to 66' AGL/780' MSL.

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EC-1, 23 SEP 2010 to 21 OCT 2010

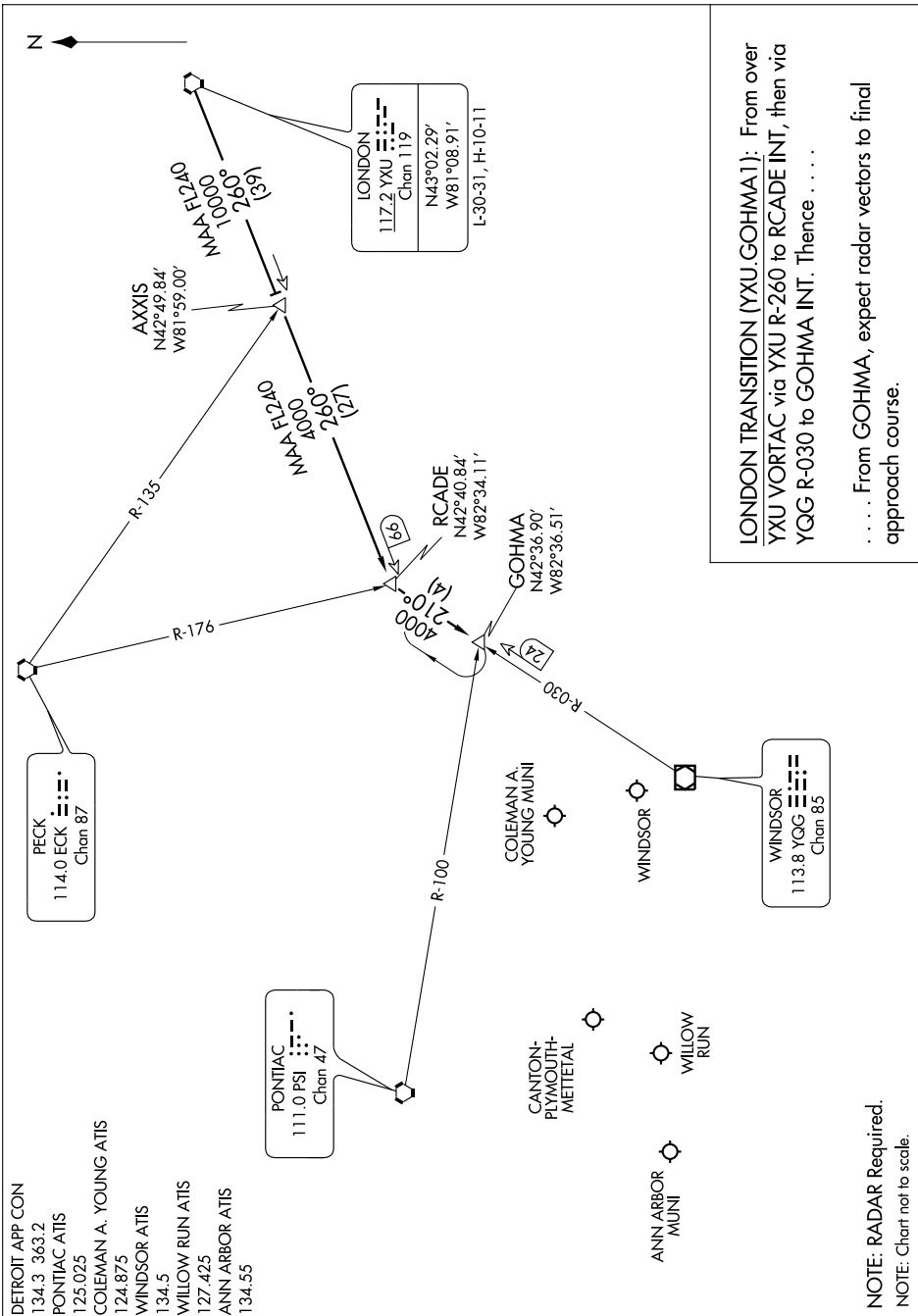
# GOHMA ONE ARRIVAL

DETROIT APP CON  
134.3 363.2  
PONTIAC ATIS  
125.025  
COLEMAN A. YOUNG ATIS  
124.875  
WINDSOR ATIS  
134.5  
WILLOW RUN ATIS  
127.425  
ANN ARBOR ATIS  
134.55

GOHMA ONE ARRIVAL  
(GOHMA.GOHMA1) 09351

ST-467 (FAA)

DETROIT, MICHIGAN



EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010

## HOT SPOTS

An "airport surface hot spot" is a location on an aerodrome movement area with a history or potential risk of collision or runway incursion, and where heightened attention by pilots/drivers is necessary.

A "hot spot" is a runway safety related problem area on an airport that presents increased risk during surface operations. Typically it is a complex or confusing taxiway/taxiway or taxiway/runway intersection. The area of increased risk has either a history of or potential for runway incursions or surface incidents, due to a variety of causes, such as but not limited to: airport layout, traffic flow, airport marking, signage and lighting, situational awareness, and training. Hot spots are depicted on airport diagrams as open circles or polygons designated as "HS 1", "HS 2", etc. and tabulated in the list below with a brief description of each hot spot. Hot spots will remain charted on airport diagrams until such time the increased risk has been reduced or eliminated.

CITY/AIRPORT	HOT SPOT	DESCRIPTION*
DETROIT, MI		
DETROIT METROPOLITAN		
WAYNE COUNTY (DTW)	HS 1	Rwy 04R-22L and Rwy 09L-27R.
	HS 2	Rwy 03L-21R and Rwy 09L-27R.
	HS 3	Twy F and Rwy 03L-21R.
DETROIT, MI		
WILLOW RUN (YIP)	HS 1	Complex rwys/twy int.
	HS 2	Twy E1 to Rwy 27 or Rwy 23L wrong rwy departure risk.
JACKSON, MI		
JACKSON COUNTY-		
REYNOLDS FIELD (JXN)	HS 1	Confusing signage.
	HS 2	No signage.
KALAMAZOO, MI		
KALAMAZOO/BATTLE		
CREEK INTL (AZO)	HS 1	Complex rwy/twy int.
	HS 2	Wrong rwy departure risk from Twy C.
	HS 3	Wrong rwy departure risk from Twy F.

\*See appropriate A/FD, Alaska or Pacific Supplement HOT SPOT table for additional information.

LOC/DME I-YIP <b>109.5</b> Chan <b>32</b>	APP CRS <b>053°</b>	Rwy Idg <b>5R 5L</b> TDZE <b>7526 5995</b> Apt Elev <b>715 716</b>
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# ILS or LOC RWY 5R

DETROIT/WILLOW RUN (YIP)

▼ For inoperative MALSRR increase S-LOC-5R Cat A and B; visibility to RVR 5000.  
Inoperative table does not apply to S-ILS all cats.



MISSED APPROACH: Climb to 1200, then climbing left turn to 3000 direct SVM VORTAC and hold.

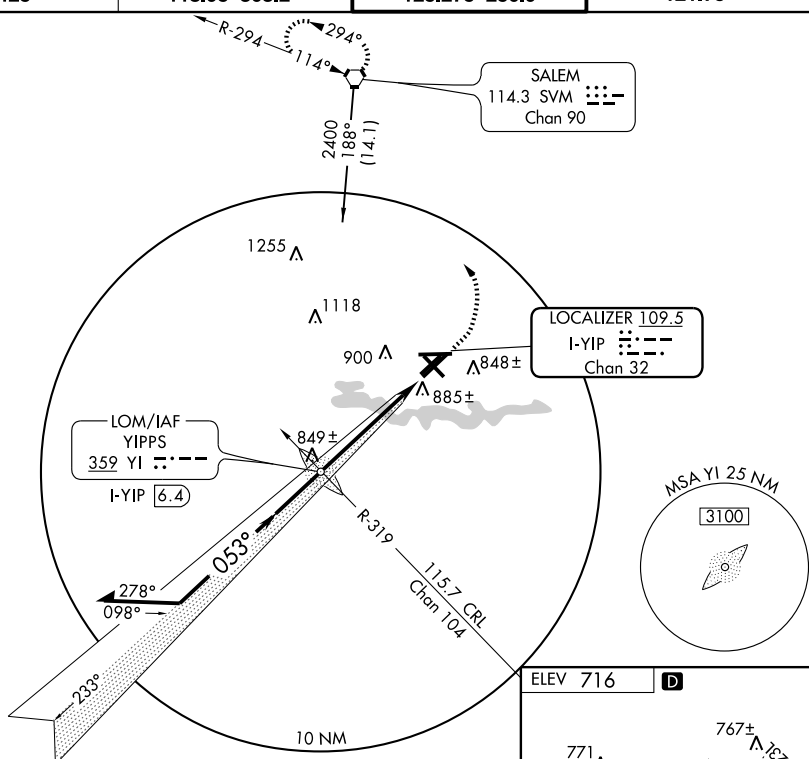
ATIS  
**127.425**

DETROIT APP CON  
**118.95 363.2**

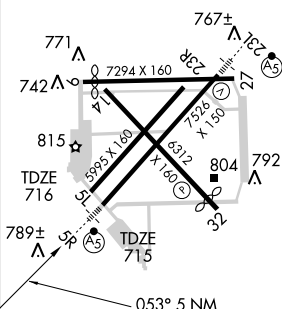
WILLOW RUN TOWER  
**125.275 256.9**

GND CON  
**121.75**

1749  $\Delta$



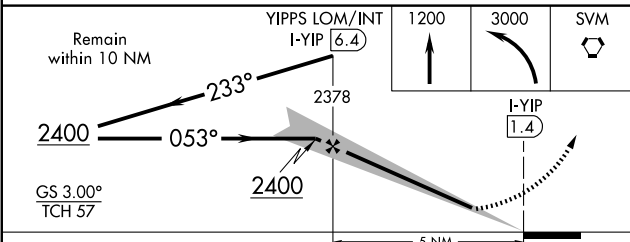
ELEV 716 **D**



HIRL Rwy 5R-23L  
REIL Rwy 27L and 32  
MIRL Rwy 9R-27L, 14-32,  
5L-23R, and 9L-27R

FAF to MAP 5 NM

Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40



CATEGORY	A	B	C	D
S-ILS 5R		965/40	250 (300-3/4)	
S-LOC 5R		1120/40	405 (500-3/4)	
CIRCLING	1200-1	484 (500-1)	1200-1 1/2 484 (500-1 1/2)	1280-2 564 (600-2)
SIDESTEP RWY 5L	1120-1	404 (500-1)	1120-1 1/2 404 (500-1 1/2)	1120-2 404 (500-2)

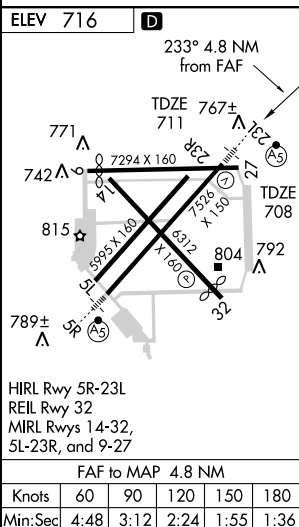
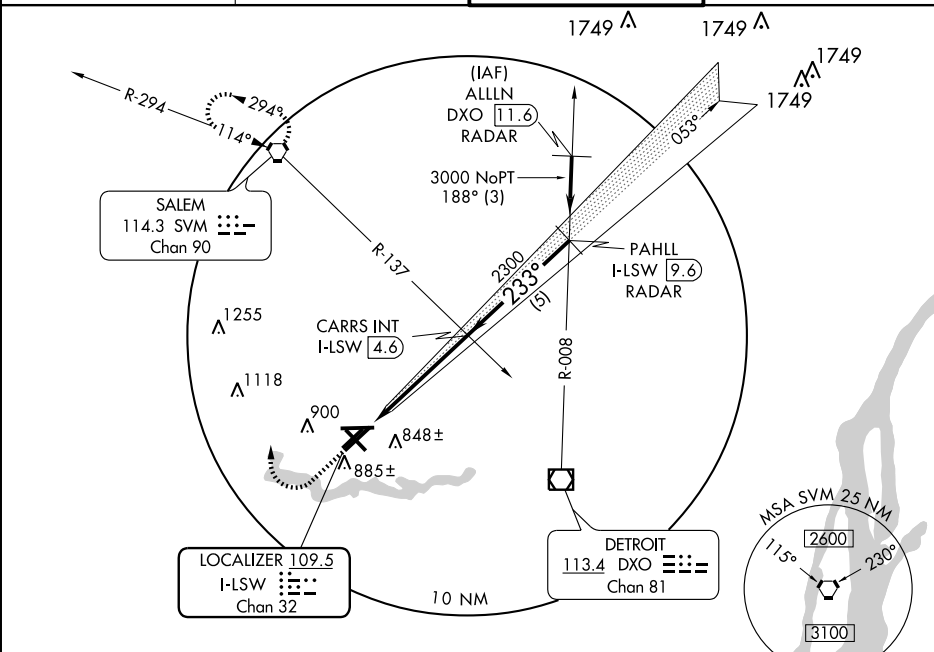
LOC/DME I-LSW <b>109.5</b> Chan <b>32</b>	APP CRS <b>233°</b>	Rwy Idg TDZE Apt Elev	<b>7526</b> <b>708</b> <b>716</b>
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# ILS or LOC RWY 23L

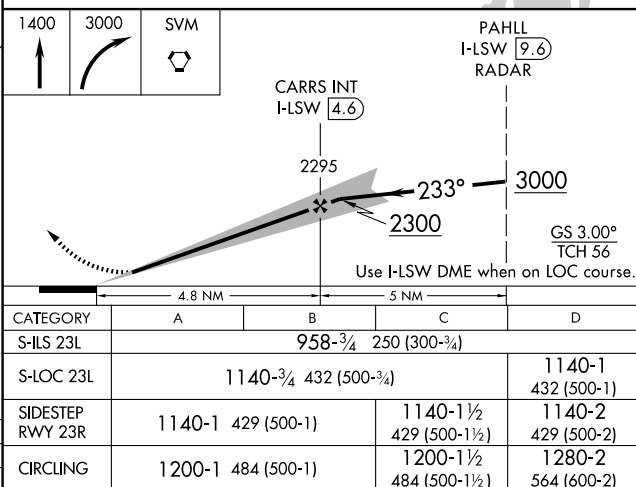
DETROIT/WILLOW RUN (YIP)

<p><b>▼</b> Inoperative table does not apply to S-ILS 23L. For inoperative MALSR, increase S-LOC 23 Cat A and B visibility to 1.</p>	<p>MALSR </p>	<p>MISSED APPROACH: Climb to 1400, then climbing right turn to 3000 direct SVM VORTAC and hold.</p>
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ATIS <b>127.425</b>	DETROIT APP CON <b>118.95 363.2</b>	WILLOW RUN TOWER <b>125.275 256.9</b>	GND CON <b>121.75</b>
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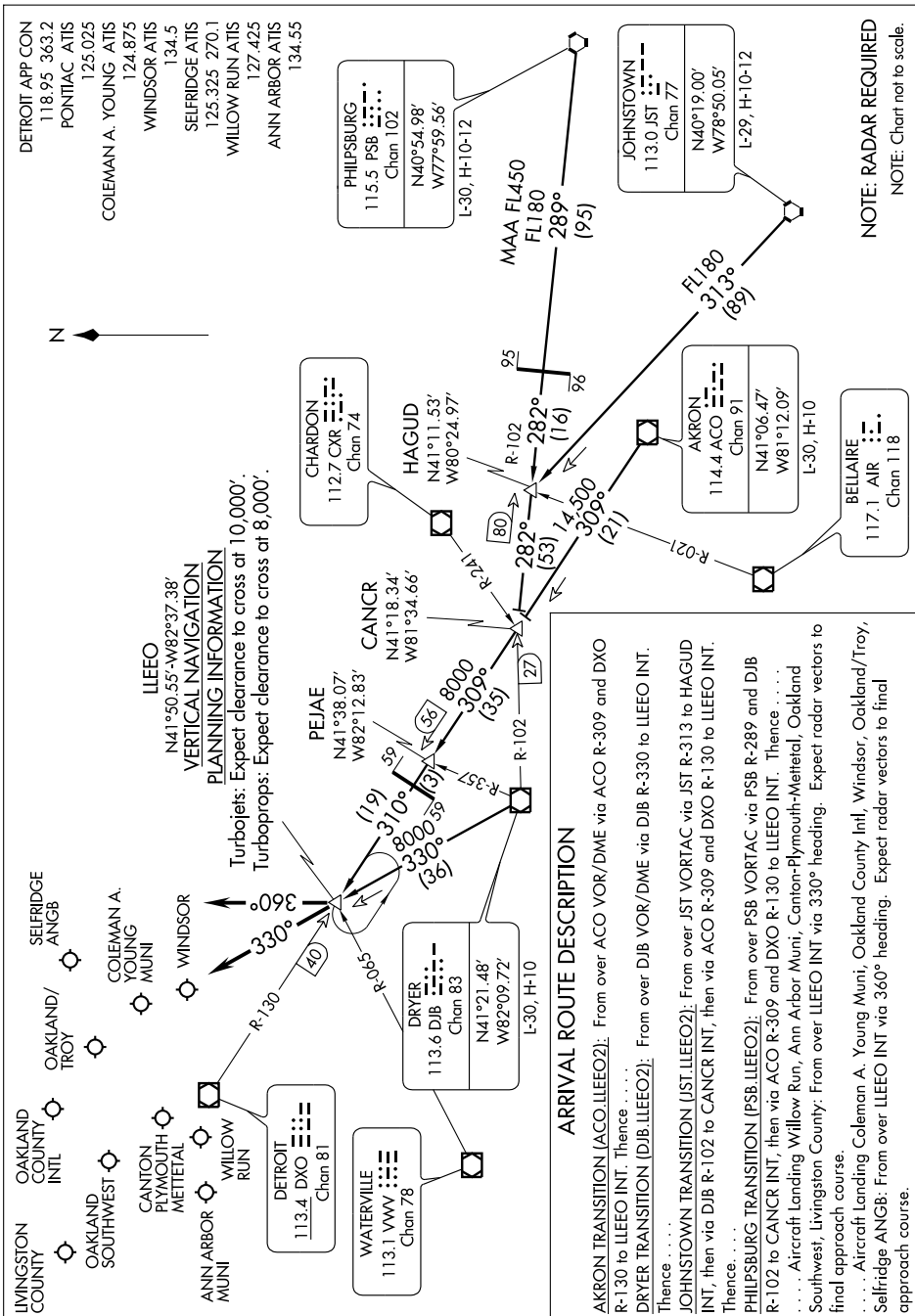


## RADAR REQUIRED





## LEEO TWO ARRIVAL



**EC-1, 23 SEP 2010 to 21 OCT 2010**

EC-1 23 SEP 2010 to 21 OCT 2010

## LEEO TWO ARRIVAL

(LLEO.LLEO2) 09127

DETROIT, MICHIGAN





DEPARTURE ROUTE DESCRIPTION

TAKE-OFF ALL RUNWAYS: Climb via assigned heading for radar vectors to join the assigned SID. Maintain 3000 feet, expect clearance to filed altitude/flight level ten (10) minutes after departure.

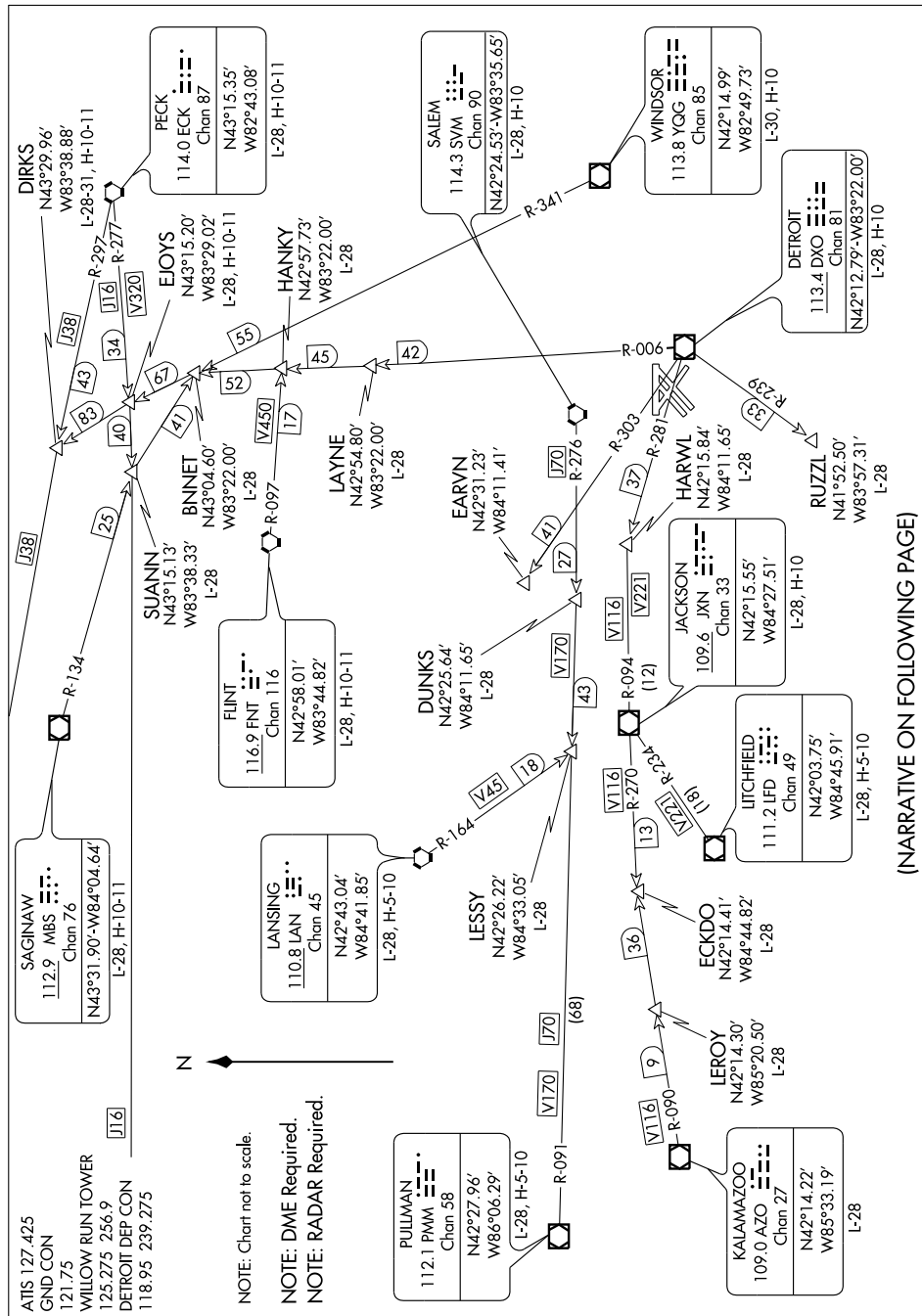
DUNKIRK TRANSITION (MOONN2.DKK): From over MOONN INT via SVM R-095 to BROKK INT, then via SVM R-095 and JHW R-282 to BEWEL INT, then via DKK R-267 to DKK VORTAC.

JAMESTOWN TRANSITION (MOONN2.JHW): From over MOONN INT via SVM R-095 to BROKK INT, then via SVM R-095 and JHW R-282 to BEWEL INT, then via JHW R-282 to JHW VOR/DME.

LONDON TRANSITION (MOONN2.YXU): From over MOONN INT via SVM R-095 to BROKK INT, then via YXU R-212 to YXU VORTAC.

TAKE-OFF OBSTACLES

- Rwy 5L: Multiple trees beginning 1438' to 2887' from DER, from 119' to 438' left of centerline, up to 79' AGL/785' MSL.
- Rwy 5R: Multiple trees beginning 1877' to 2472' from DER, from 134' to 922' left and right of centerline, up to 78' AGL/777' MSL.
- Rwy 9R: Multiple trees beginning 827' to 2598' from DER, from 432' to 600' left and right of centerline, up to 77' AGL/780' MSL.
- Rwy 23L: Tree 1304' from DER, 438' right of centerline, 42' AGL/757' MSL.  
Tree 2457' from DER, 720' left of centerline, 66' AGL/781' MSL.
- Rwy 23R: Multiple trees and road beginning 587' to 1333' from DER, from 282' to 814' left and right of centerline, up to 77' AGL/793' MSL.
- Rwy 27L: Multiple trees and pole beginning 1273' to 2024' from DER, from 47' to 769' left and right of centerline, up to 90' AGL/805' MSL.
- Rwy 27: Railroad and lights beginning 564' to 1565' from DER, from 4' to 333' left of centerline, up to 54' AGL/770' MSL.  
Tree and lights beginning 102' to 1257' from DER, from 10' to 485' right of centerline, up to 55' AGL/771' MSL.  
Tower 7161' from DER, 502' left of centerline, 162' AGL/900' MSL.
- Rwy 32: Multiple trees and poles beginning 701' to 1884' from DER, from 78' to 750' left of centerline, up to 84' AGL/798' MSL.  
Multiple trees 1157' to 1893' from DER, from 126' to 475' right of centerline, up to 66' AGL/780' MSL.



(NARRATIVE ON FOLLOWING PAGE)

EC-1. 23 SEP 2010 to 21 OCT 2010



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF MINIMUMS:

Rwy 5L, 5R, 9, 14, 23L, 23R, 32: Standard.

Rwy 27: 200-1½ or Standard with minimum climb of 206 feet per NM to 1000.

TAKE-OFF ALL RUNWAYS: Climb via assigned heading for radar vectors to join the assigned SID. Maintain 3000 feet, expect clearance to filed altitude/flight level ten (10) minutes after departure.

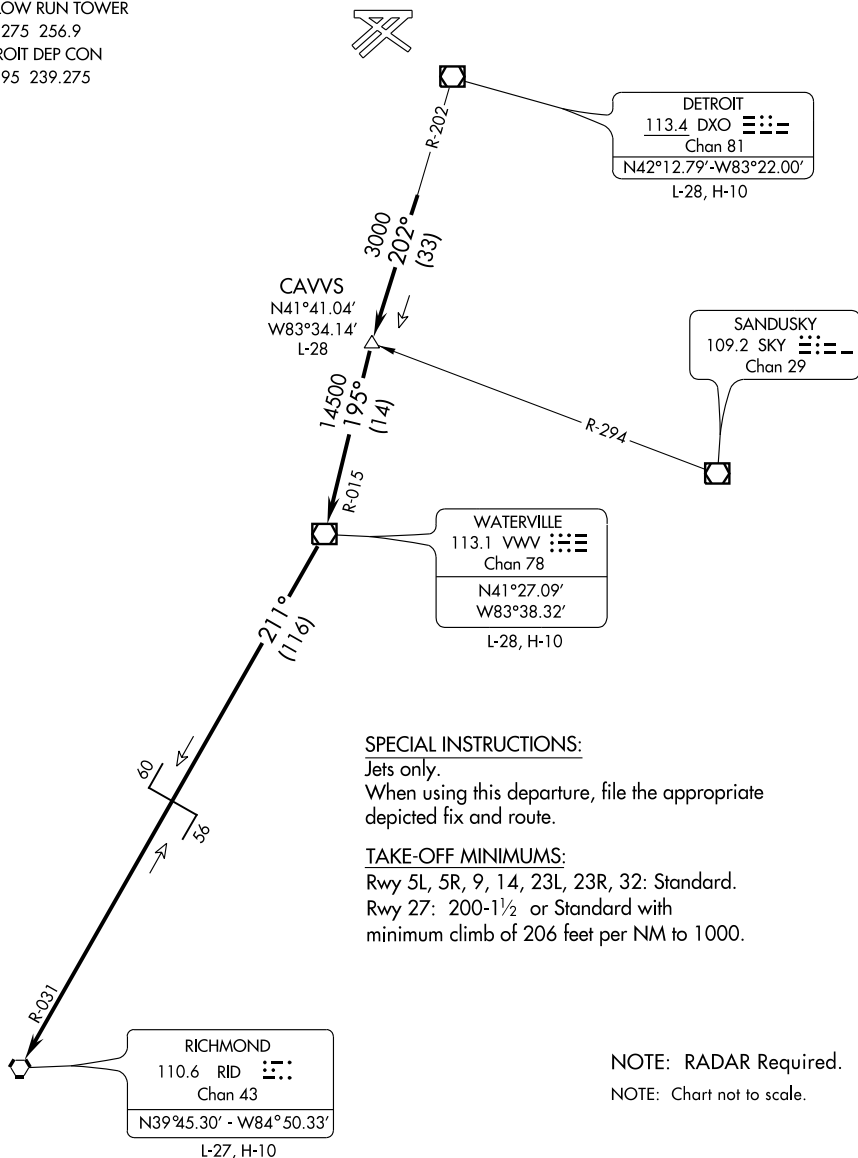
SPECIAL INSTRUCTIONS:

When using this departure, file the appropriate depicted departure fix and route. Aircraft landing/overflying Lansing (LAN) or overflying Flint (FNT) at 10,000 feet or below, file via EARVN. Aircraft landing Flint (FNT) at 10,000 feet or below, file via LAYNE. Aircraft landing/overflying Toledo (TOL) at 10,000 feet or below, file via RUZZL. Aircraft over HARWL must file FL220 and below.

TAKE-OFF OBSTACLES:

- Rwy 5L: Multiple trees beginning 1438' to 2887' from DER, from 119' to 438' left of centerline, up to 79' AGL/785' MSL.
- Rwy 5R: Multiple trees beginning 1877' to 2472' from DER, from 134' to 922' left and right of centerline, up to 78' AGL/777' MSL.
- Rwy 9R: Multiple trees beginning 827' to 2598' from DER, from 432' to 600' left and right of centerline, up to 77' AGL/780' MSL.
- Rwy 23L: Tree 1304' from DER, 438' right of centerline, 42' AGL/757' MSL. Tree 2457' from DER, 720' left of centerline, 66' AGL/781' MSL.
- Rwy 23R: Multiple trees and road with vehicle beginning 587' to 1333' from DER, from 282' to 814' left and right of centerline, up to 77' AGL/793' MSL.
- Rwy 27L: Multiple trees and pole beginning 1273' to 2024' from DER, from 47' to 769' left and right of centerline, up to 90' AGL/805' MSL.
- Rwy 27: Railroad and lights beginning 564' to 1565' from DER, from 4' to 333' left of centerline, up to 54' AGL/770' MSL. Tree and lights beginning 102' to 1257' from DER, from 10' to 485' right of centerline, up to 55' AGL/771' MSL. Tower 7161' from DER, 502' left of centerline, 162' AGL/900' MSL.
- Rwy 32: Multiple trees and poles beginning 701' to 1884' from DER, from 78' to 750' left of centerline, up to 84' AGL/798' MSL. Multiple trees 1157' to 1893' from DER, from 126' to 475' right of centerline, up to 66' AGL/780' MSL.

ATIS 127.425  
GND CON  
121.75  
WILLOW RUN TOWER  
125.275 256.9  
DETROIT DEP CON  
118.95 239.275



(NARRATIVE ON FOLLOWING PAGE)



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF ALL RUNWAYS: Climb via assigned heading for radar vectors, thence. . . .

. . . . To intercept DXO VOR/DME R-202 to CAVVS INT/DXO 33 DME, then via VWV R-015 to VWV VOR/DME. Then right turn via VWV R-211 and RID R-031 to RID VORTAC. Maintain 3,000 feet, expect clearance to filed altitude/flight level ten (10) minutes after departure.

TAKE-OFF OBSTACLES:

- Rwy 5L: Multiple trees beginning 1438' to 2887' from DER, from 119' to 438' left of centerline, up to 79' AGL/785' MSL.
- Rwy 5R: Multiple trees beginning 1877' to 2472' from DER, from 134' to 922' left and right of centerline, up to 78' AGL/777' MSL.
- Rwy 9R: Multiple trees beginning 827' to 2598' from DER, from 432' to 600' left and right of centerline, up to 77' AGL/780' MSL.
- Rwy 23L: Tree 1304' from DER, 438' right of centerline, 42' AGL/757' MSL.  
Tree 2457' from DER, 720' left of centerline, 66' AGL/781' MSL.
- Rwy 23R: Multiple trees and road beginning 587' to 1333' from DER, from 282' to 814' left and right of centerline, up to 77' AGL/793' MSL.
- Rwy 27L: Multiple trees and pole beginning 1273' to 2024' from DER, from 47' to 769' left and right of centerline, up to 90' AGL/805' MSL.
- Rwy 27: Railroad and lights beginning 564' to 1565' from DER, from 4' to 333' left of centerline, up to 54' AGL/770' MSL.  
Tree and lights beginning 102' to 1257' from DER, from 10' to 485' right of centerline, up to 55' AGL/771' MSL.  
Tower 7161' from DER, 502' left of centerline, 162' AGL/900' MSL.
- Rwy 32: Multiple trees and poles beginning 701' to 1884' from DER, from 78' to 750' left of centerline, up to 84' AGL/798' MSL.  
Multiple trees 1157' to 1893' from DER, from 126' to 475' right of centerline, up to 66' AGL/780' MSL.

APP CRS	Rwy Idg	<b>5995</b>
<b>053°</b>	TDZE	<b>716</b>
	Apt Elev	<b>716</b>

# RNAV (GPS) RWY 5L

DETROIT/WILLOW RUN (YIP)

**▼** Circling NA at night to RWY 09L, 14, 23R.  
**▲** NA GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.  
 Straight-in/Circling NA at night to Rwy 05L.

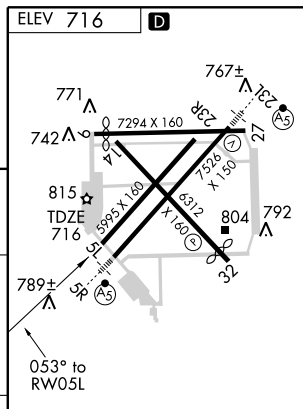
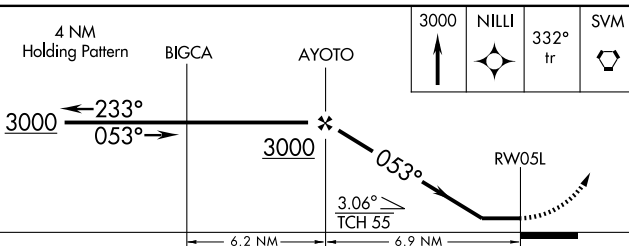
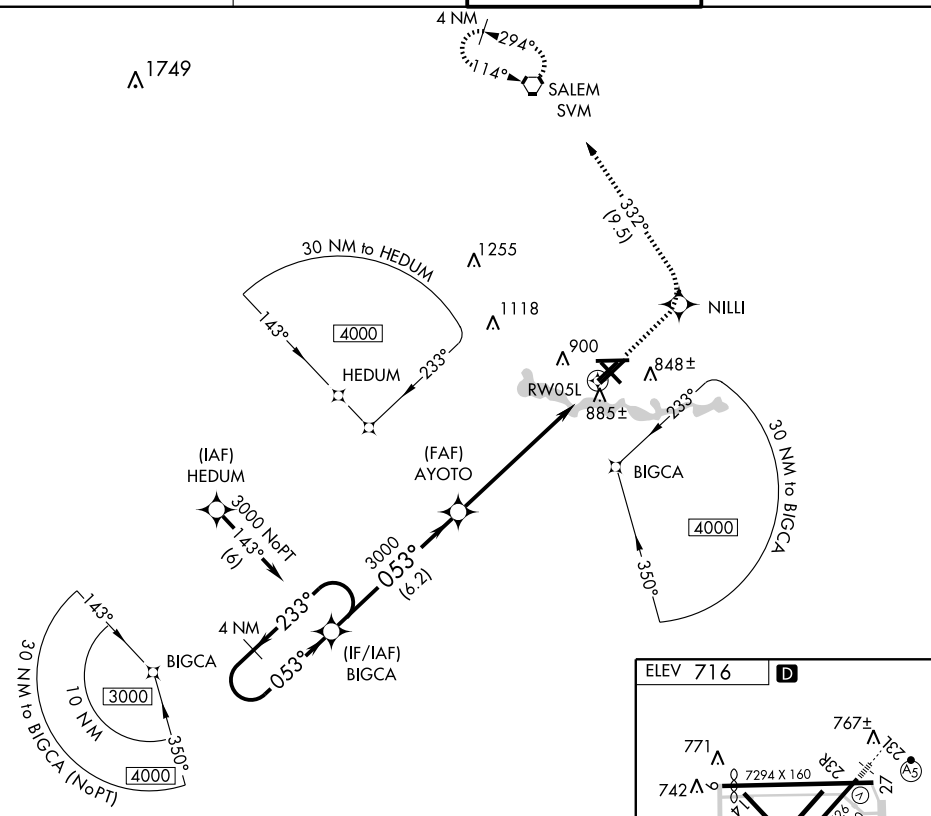
**MISSED APPROACH:** Climb to 3000 direct NILLI WP and via 332° track to SVM VORTAC and hold.

ATIS  
**127.425**

DETROIT APP CON  
**118.95 363.2**

WILLOW RUN TOWER  
**125.275 256.9**

GND CON  
**121.75**



CATEGORY	A	B	C	D
LNAV MDA	1240-1 524 (600-1)	1240-1½ 524 (600-1½)	1240-1¾ 524 (600-1¾)	1240-2 564 (600-2)
CIRCLING	1240-1 524 (600-1)	1240-1½ 524 (600-1½)	1240-1¾ 524 (600-1¾)	1240-2 564 (600-2)

HIRL Rwy 5R-23L  
 REIL Rwy 32  
 MIRL Rwy 14-32, 5L-23R, and 9-27



WAAS CH <b>97718</b> <b>W05A</b>	APP CRS <b>053°</b>	Rwy Idg TDZE <b>715</b> Apt Elev <b>716</b>
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# RNAV (GPS) RWY 5R

DETROIT/WILLOW RUN (YIP)

**⚠** Circling to Rwy 5L, 9, 14, 23R NA at night. Inoperative table does not apply to LPV all Cats. For inoperative MALS, increase LNAV Cat A/B visibility to RVR 5000. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.

MALSR



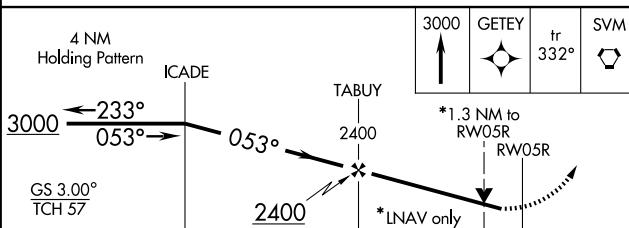
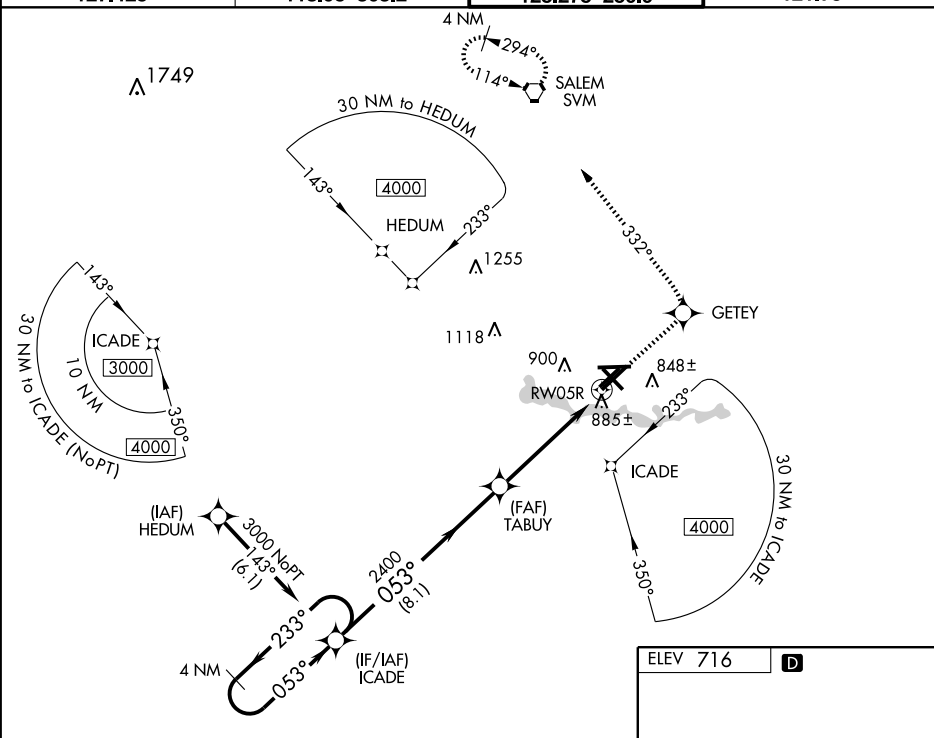
**MISSED APPROACH:** Climb to 3000 direct GETEY and on track 332° to SVM VORTAC and hold.

ATIS  
**127.425**

DETROIT APP CON  
**118.95 363.2**

WILLOW RUN TOWER  
**125.275 256.9**

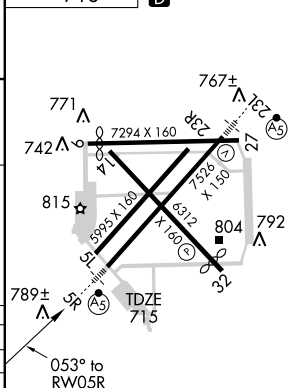
GND CON  
**121.75**



CATEGORY	A	B	C	D
LPV DA	965/40	250 (300-¾)		
LNAV/VNAV DA	1185/50	470 (500-1)		
LNAV MDA	1200/40	485 (500-¾)	1200/50	485 (500-1)
CIRCLING	1200-1	484 (500-1)	1200-1½	1280-2
			484 (500-1½)	564 (600-2)

ELEV 716

D



HIRL Rwy 5R-23L  
REIL Rwy 32  
MIRL Rwy 14-32,  
5L-23R, and 9-27

APP CRS	Rwy Idg	<b>6718</b>
<b>094°</b>	TDZE	<b>715</b>
	Apt Elev	<b>716</b>

# RNAV (GPS) RWY 9

DETROIT/WILLOW RUN (YIP)



DME/DME RNP-0.3 NA.  
Procedure NA at night.  
Visibility reduction by helicopters NA.

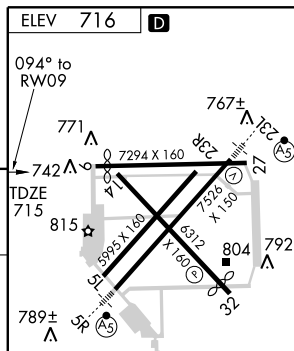
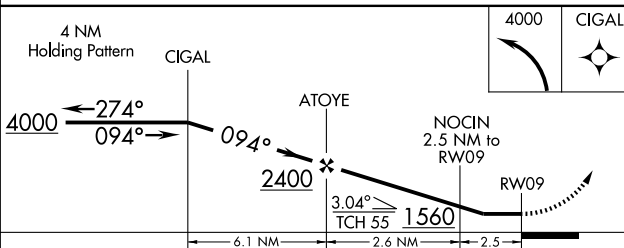
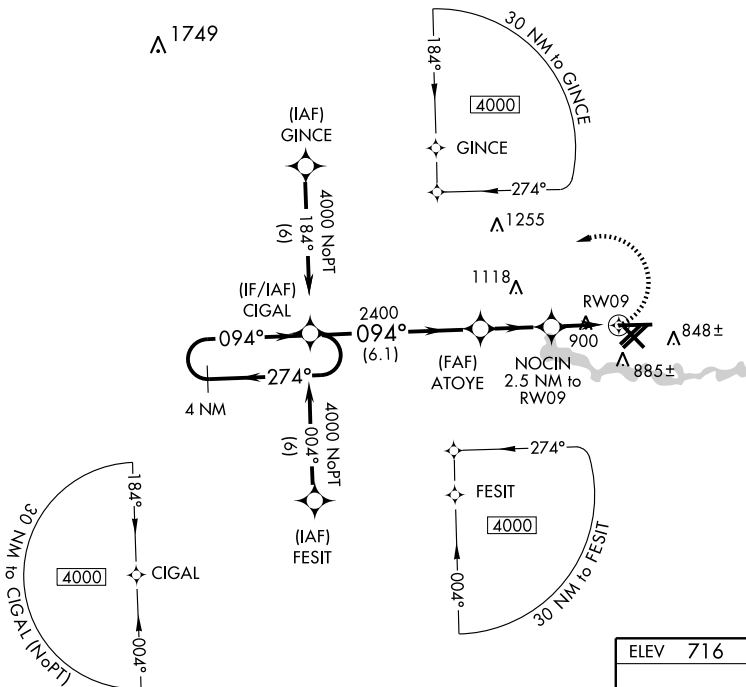
MISSED APPROACH: Climbing left turn to 4000  
direct CIGAL and hold.

ATIS  
**127.425**

DETROIT APP CON  
**118.95 363.2**

WILLOW RUN TOWER  
**125.275 256.9**

GND CON  
**121.75**



CATEGORY	A	B	C	D
RNAV MDA	1160-1	445 (500-1)	1160-1½ 445 (500-1½)	1160-1½ 445 (500-1½)
CIRCLING	1200-1	484 (500-1)	1200-1½ 484 (500-1½)	1280-2 564 (600-2)

HIRL Rwy 5R-23L  
REIL Rwy 32  
MIRL Rwys 14-32,  
5L-23R, and 9-27

APP CRS	Rwy Idg	<b>6511</b>
<b>094°</b>	TDZE	<b>715</b>
	Apt Elev	<b>716</b>

**RNAV (GPS) RWY 9R**

DETROIT/WILLOW RUN (YIP)



Circling to Rwy 5L, 9L, 14, 23R NA at night.  
DME/DME RNP-0.3 NA.  
Visibility reduction by helicopters NA.

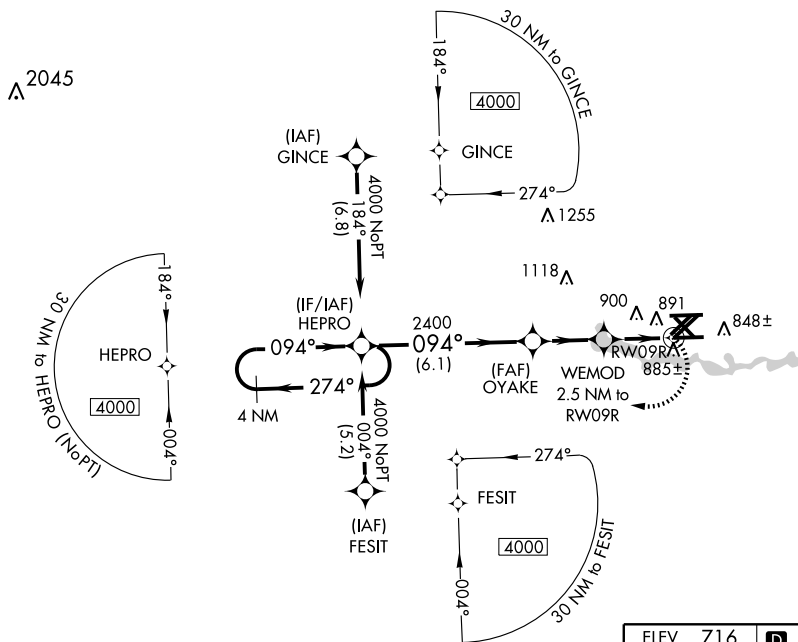
MISSED APPROACH: Climbing right turn to 4000  
direct HEPRO and hold.

ATIS  
**127.425**

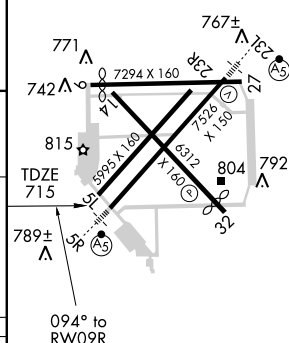
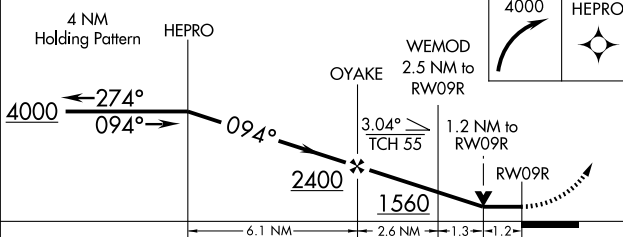
DETROIT APP CON  
**118.95 363.2**

WILLOW RUN TOWER  
**125.275 256.9**

GND CON  
**121.75**



ELEV 716

**D**

CATEGORY	A	B	C	D
LNVA MDA	1160-1	445 (500-1)	1160-1½ 445 (500-1½)	1160-1½ 445 (500-1½)
CIRCLING	1200-1	484 (500-1)	1200-1½ 484 (500-1½)	1280-2 564 (600-2)

HIRL Rwy 5R-23L  
REIL Rwy 32  
MIRL Rwy 14-32,  
5L-23R, and 9-27





APP CRS	Rwy Idg	<b>5995</b>
<b>233°</b>	TDZE	<b>711</b>
	Apt Elev	<b>716</b>

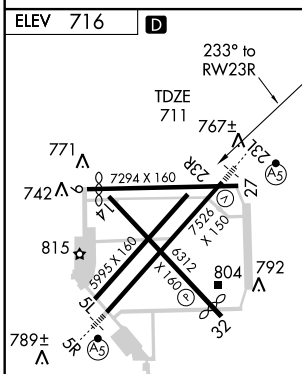
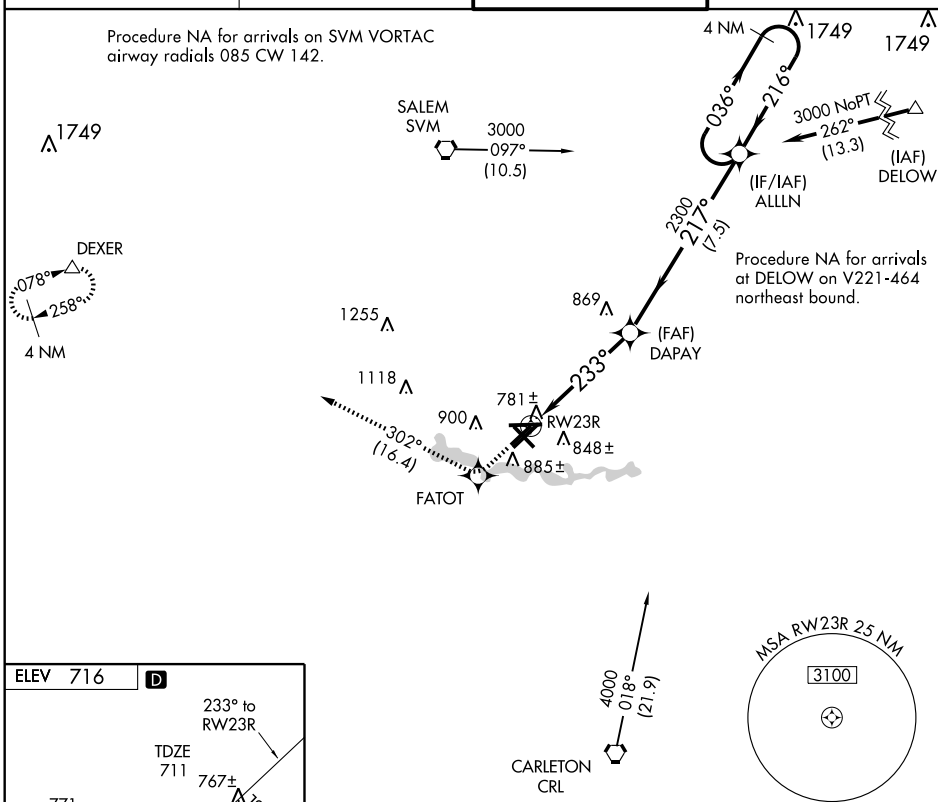
## RNAV (GPS) RWY 23R

DETROIT/ WILLOW RUN (YIP)

<p><b>V</b> DME/DME RNP-0.3 NA.</p> <p><b>A NA</b> Straight-in/Circling to Rwy 23R NA at night. Circling NA at night to Rwy 5L, 9L, 14.</p>	<p><b>MISSED APPROACH:</b> Climb to 3000 direct FATOT WP and via 302° track to DEXER WP and hold.</p>
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ATIS 127,425	DETROIT APP CON 118.95 363.2	WILLOW RUN TOWER 125,275 256.9	GND CON 121.75
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Procedure NA for arrivals on SVM VORTAC  
airway radials 085 CW 142.



HIRL Rwy 5R-23L  
REIL Rwy 32  
MIRL Rwy 14-32,  
51-23R, and 9-27

CATEGORY	A	B	C	D
LNAV MDA	1120 - 1	409 (500-1)	1120-1¼	409 (500-1¼)
CIRCLING	1200 - 1	484 (500-1)	1200 - 1½ 484 (500-1½)	1280 - 2 564 (600-2)

DETROIT, MICHIGAN  
Orig-A 10266

42°14'N - 83°32'W

DETROIT/ WILLOW RUN (YIP)

RNAV (GPS) RWY 23R

EC-1. 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010

## ROSEWOOD TWO DEPARTURE

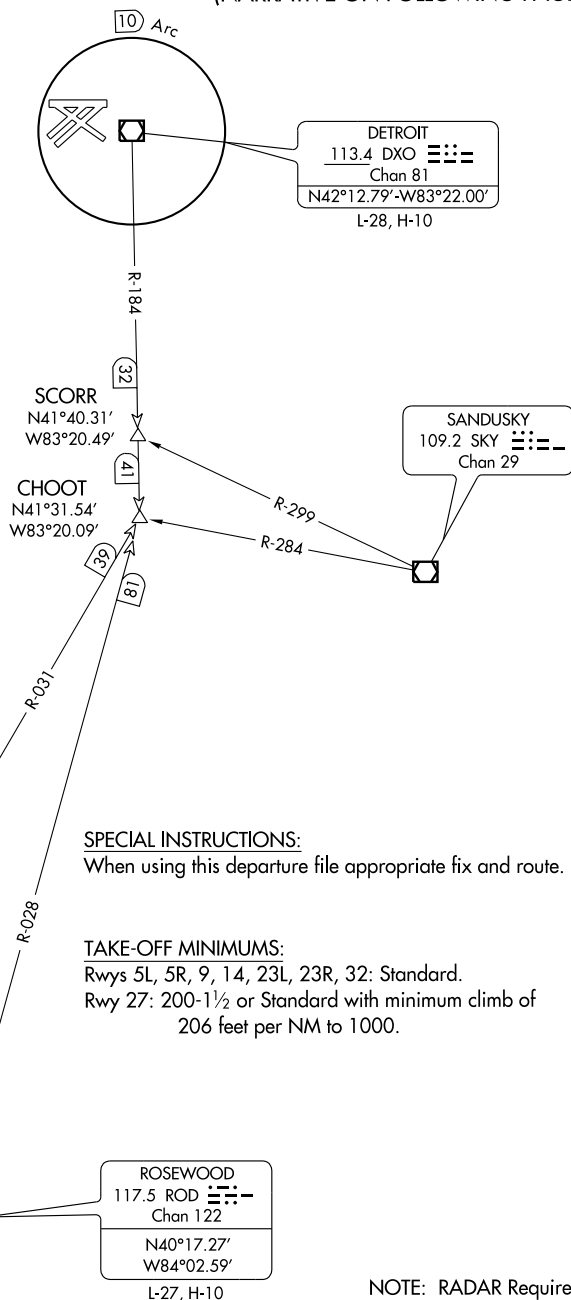
SL-467 (FAA)

DETROIT/ WILLOW RUN (YIP)

DETROIT, MICHIGAN

ATIS 127.425  
GND CON  
121.75  
WILLOW RUN TOWER  
125.275 256.9  
DETROIT DEP CON  
118.95 239.275

(NARRATIVE ON FOLLOWING PAGE)



NOTE: Chart not to scale.

NOTE: RADAR Required.

## ROSEWOOD TWO DEPARTURE

(ROD2.ROD) 10154

DETROIT, MICHIGAN  
DETROIT/ WILLOW RUN (YIP)



## DEPARTURE ROUTE DESCRIPTION

TAKE-OFF ALL RUNWAYS: Climb via assigned heading for radar vectors to join the assigned SID. Maintain 3000 feet, expect clearance to filed altitude / flight level ten (10) minutes after departure.

TAKE-OFF OBSTACLES

- Rwy 5L: Multiple trees beginning 1438' to 2887' from DER, from 119' to 438' left of centerline, up to 79' AGL/785' MSL.
- Rwy 5R: Multiple trees beginning 1877' to 2472' from DER, from 134' to 922' left and right of centerline, up to 78' AGL/777' MSL.
- Rwy 9R: Multiple trees beginning 827' to 2598' from DER, from 432' to 600' left and right of centerline, up to 77' AGL/780' MSL.
- Rwy 23L: Tree 1304' from DER, 438' right of centerline, 42' AGL/757' MSL.  
Tree 2457' from DER, 720' left of centerline, 66' AGL/781' MSL.
- Rwy 23R: Multiple trees and road with vehicle beginning 587' to 1333' from DER, from 282' to 814' left and right of centerline, up to 77' AGL/793' MSL.
- Rwy 27L: Multiple trees and pole beginning 1273' to 2024' from DER, from 47' to 769' left and right of centerline, up to 90' AGL/805' MSL.
- Rwy 27: Railroad and lights beginning 564' to 1565' from DER, from 4' to 333' left of centerline, up to 54' AGL/770' MSL.  
Tree and lights beginning 102' to 1257' from DER, from 10' to 485' right of centerline, up to 55' AGL/771' MSL.  
Tower 7161' from DER, 502' left of centerline, 162' AGL/900' MSL.
- Rwy 32: Multiple trees and poles beginning 701' to 1884' from DER, from 78' to 750' left of centerline, up to 84' AGL/798' MSL.  
Multiple trees 1157' to 1893' from DER, from 126' to 475' right of centerline, up to 66' AGL/780' MSL.

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010



(SPRTN.SPRTN3) 10210

ST-118 (FAA)

## SPRTN THREE ARRIVAL

DETROIT, MICHIGAN

DETROIT APP CON

127.5 239.275

WILLOW RUN ATIS 127.425

PONTIAC ATIS 125.025

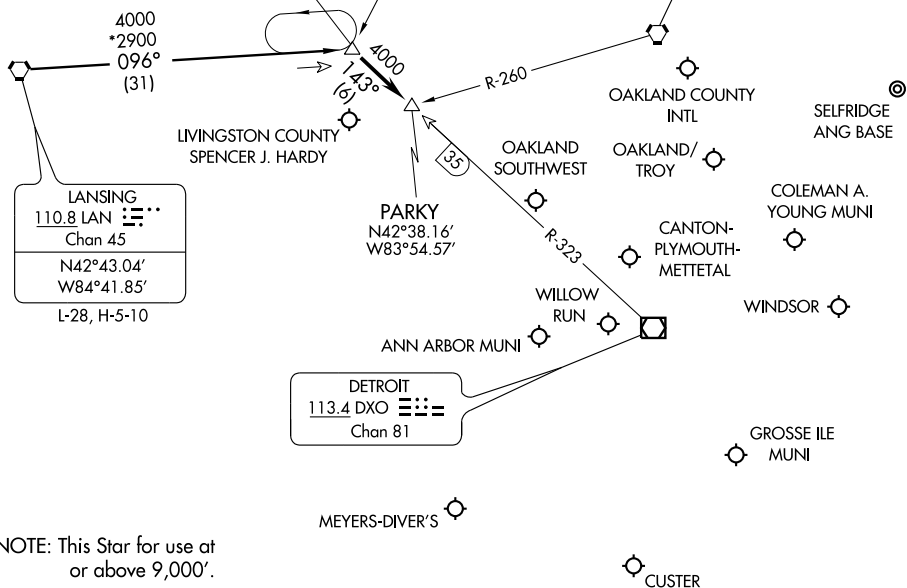
COLEMAN A. YOUNG ATIS 124.875

WINDSOR ATIS 134.5

SELFRIAGE ATIS 125.325 270.1

SPRTN

N42°42.52'-W84°00.23'

VERTICAL NAVIGATION  
PLANNING INFORMATIONTURBOJETS/TURBOPROPS:  
Expect clearance to cross at  
9000'.NOTE: This Star for use at  
or above 9,000'.

NOTE: Chart not to scale.

EC-1, 23 SEP 2010 to 21 OCT 2010

LANSING TRANSITION (LAN.SPRTN3): From over LAN VORTAC via LAN R-096  
to SPRTN INT. Thence . . . .. . . . Aircraft landing: DET, PTK, VLL, D98, MTC, ARB, YIP, ONZ,  
1D2, TTF, Y47, 36MI, OZW, 3TE, YQG: From over SPRTN INT via DXO R-323  
to PARKY INT. Thence . . . .

. . . . Expect radar vectors to final approach course.

## SPRTN THREE ARRIVAL

DETROIT, MICHIGAN

(SPRTN.SPRTN3) 10210



VORTAC SVM <b>114.3</b> Chan <b>90</b>	APP CRS <b>164°</b>	Rwy Idg <b>N/A</b> TDZE <b>N/A</b> Apt Elev <b>716</b>
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VOR or GPS-A  
DETROIT/WILLOW RUN (YIP)



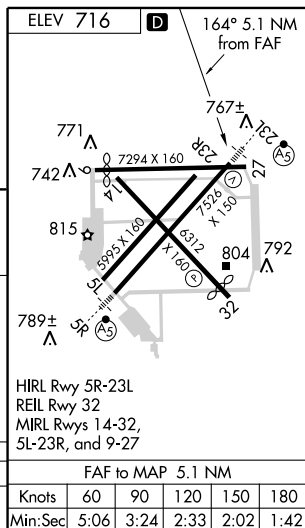
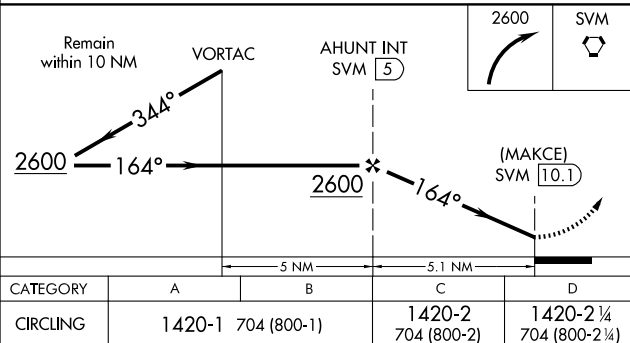
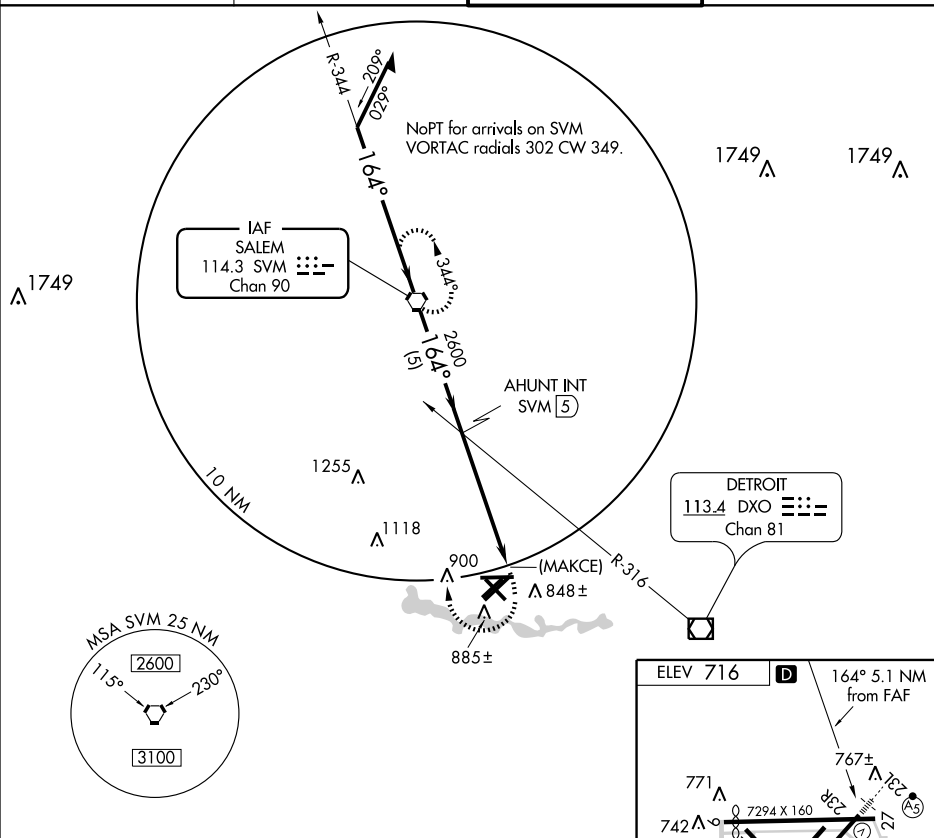
**MISSED APPROACH:** Climbing right turn to 2600 direct SVM VORTAC and hold.

ATIS  
127.425

DETROIT APP CON  
118.95 363.2

WILLOW RUN TOWER  
125.275 256.9

GND CON  
**121.75**



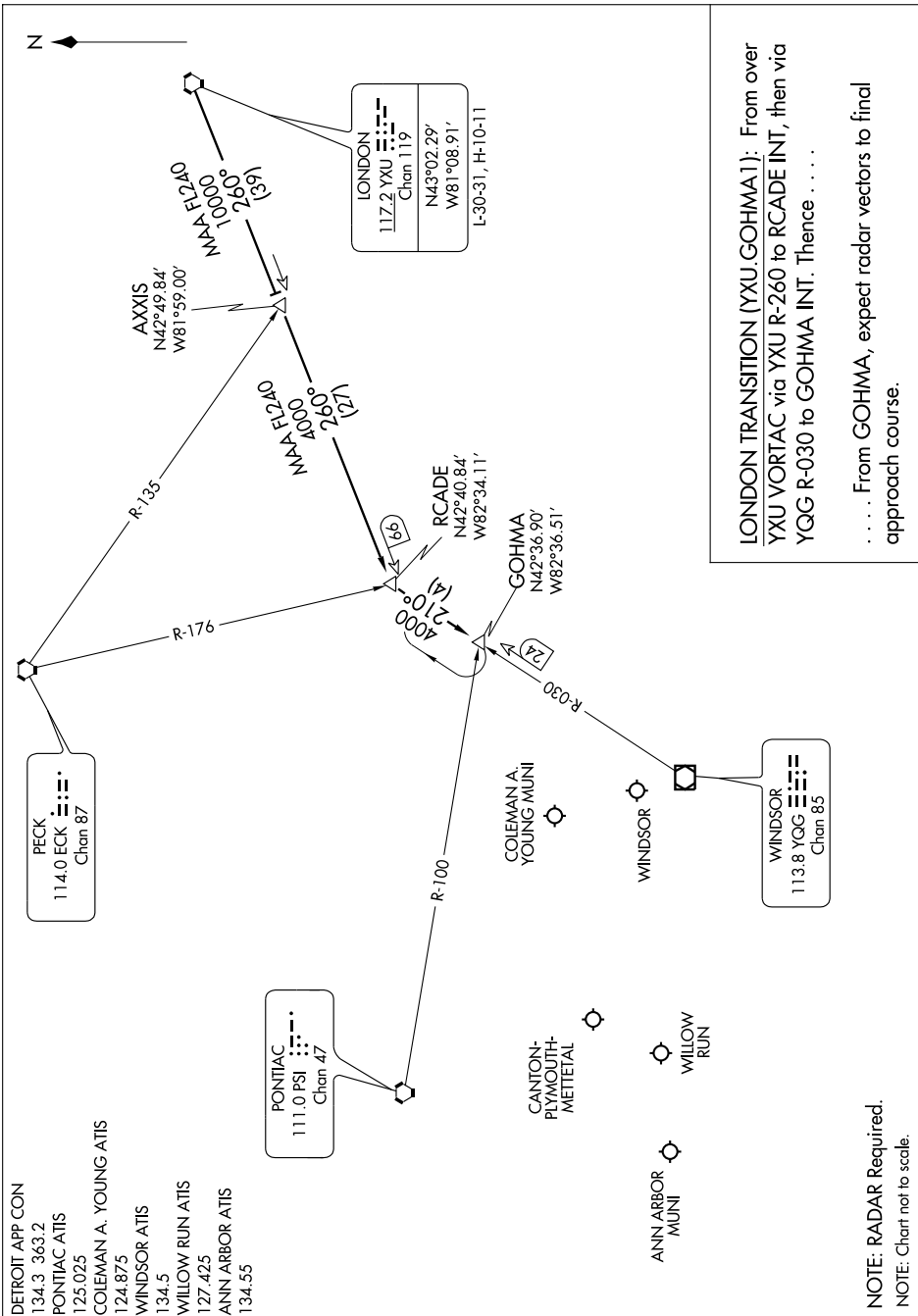
# GOHMA ONE ARRIVAL

DETROIT APP CON  
134.3 363.2  
PONTIAC ATIS  
125.025  
COLEMAN A. YOUNG ATIS  
124.875  
WINDSOR ATIS  
134.5  
WILLOW RUN ATIS  
127.425  
ANN ARBOR ATIS  
134.55

GOHMA ONE ARRIVAL  
(GOHMA.GOHMA1) 09351

ST-467 (FAA)

DETROIT, MICHIGAN

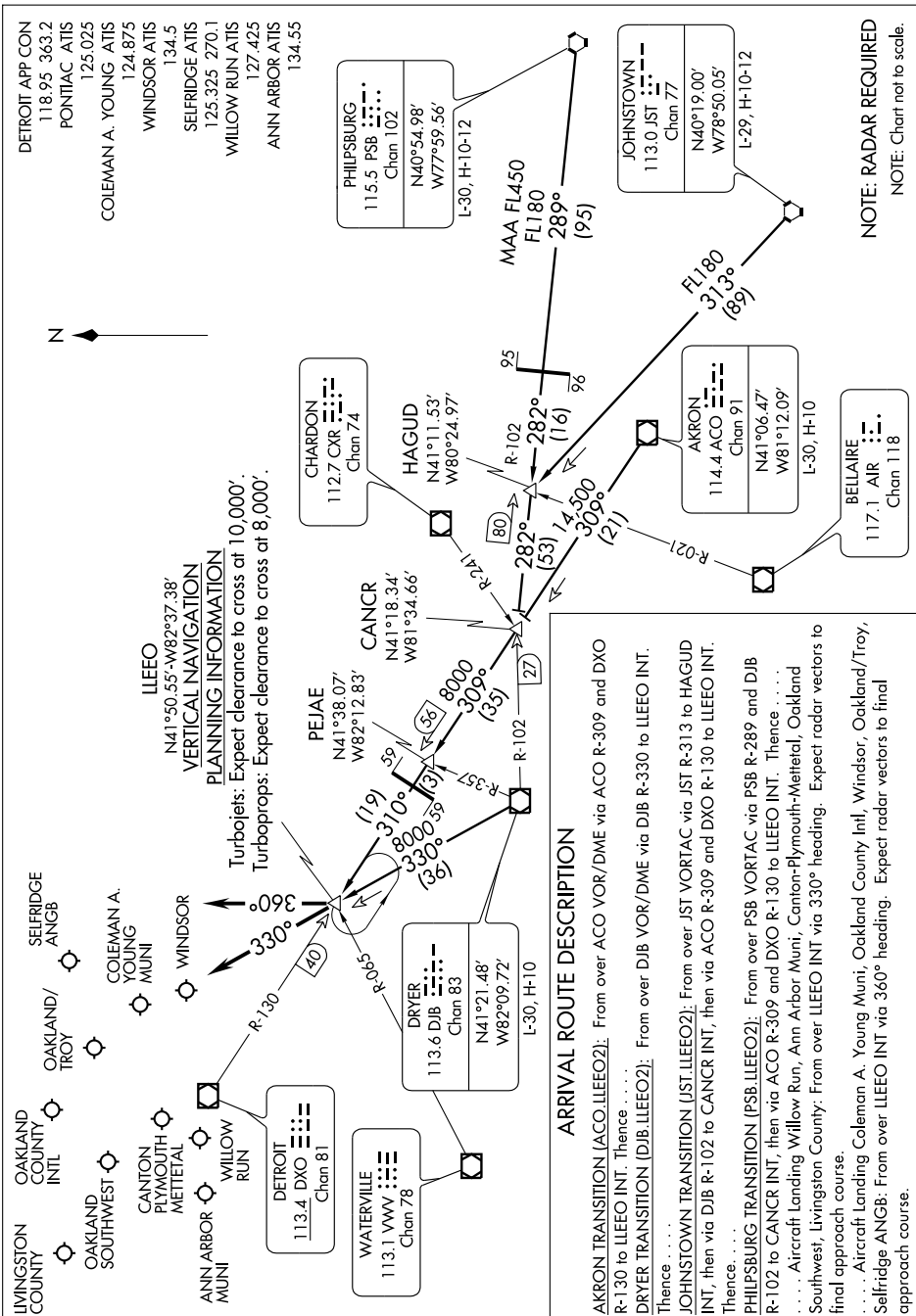


EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010

## LLEEO TWO ARRIVAL

EC-1, 23 SEP 2010 to 21 OCT 2010



## LLEEO TWO ARRIVAL

(SPRTN.SPRTN3) 10210

ST-118 (FAA)

## SPRTN THREE ARRIVAL

DETROIT, MICHIGAN

DETROIT APP CON

127.5 239.275

WILLOW RUN ATIS 127.425

PONTIAC ATIS 125.025

COLEMAN A. YOUNG ATIS 124.875

WINDSOR ATIS 134.5

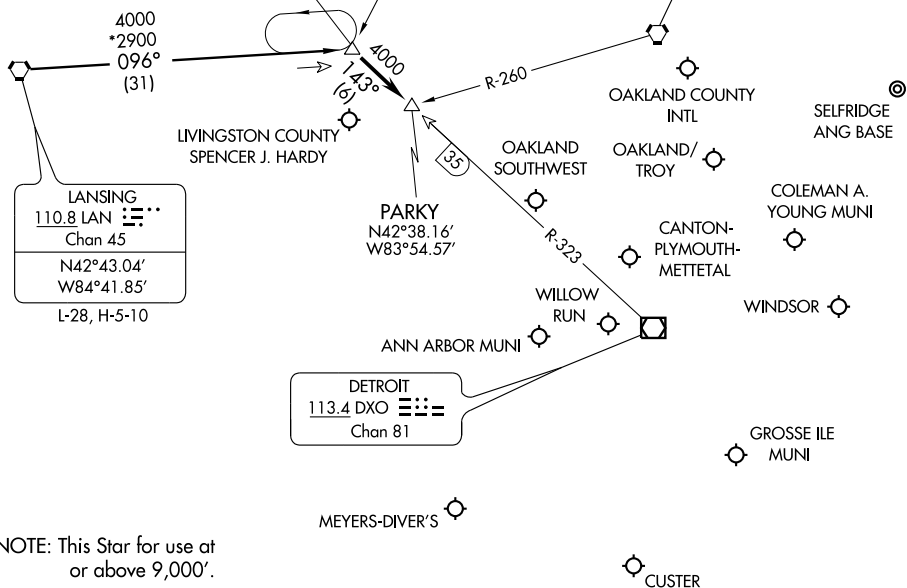
SELFREDGE ATIS 125.325 270.1

SPRTN

N42°42.52'-W84°00.23'

VERTICAL NAVIGATION  
PLANNING INFORMATION

TURBOJETS/TURBOPROPS:

Expect clearance to cross at  
9000'.NOTE: This Star for use at  
or above 9,000'.

NOTE: Chart not to scale.

EC-1, 23 SEP 2010 to 21 OCT 2010

LANSING TRANSITION (LAN.SPRTN3): From over LAN VORTAC via LAN R-096  
to SPRTN INT. Thence . . . .. . . . Aircraft landing: DET, PTK, VLL, D98, MTC, ARB, YIP, ONZ,  
1D2, TTF, Y47, 36MI, OZW, 3TE, YQG: From over SPRTN INT via DXO R-323  
to PARKY INT. Thence . . . .

. . . . Expect radar vectors to final approach course.

## SPRTN THREE ARRIVAL

DETROIT, MICHIGAN

(SPRTN.SPRTN3) 10210

**DETROIT/GROSSE ILE****GROSSE ILE MUNI** (ONZ) 2 S UTC-5(-4DT) N42°05.94' W83°09.69'

591 B S4 FUEL 100LL JET A TPA-1591(1000) NOTAM FILE ONZ

RWY 04-22: H4846X100 (CONC) S-66, D-83, 2D-105 MIRL 0.3% up NE

RWY 04: REIL. PAPI(P4L)—GA 3.0° TCH 38'. Rgt tfc.

RWY 22: REIL. PAPI (P4L)—GA 3.0° TCH 38'. Thld dsplcd 428'. Trees.

RWY 17-35: H4425X75 (CONC) S-40, D-55, 2D-90 MIRL

RWY 17: PAPI(P4L)—GA 3.0° TCH 26'. Thld dsplcd 675'. Trees.

RWY 35: PAPI(P4L)—GA 3.0° TCH 20'. Brush. Rgt tfc.

**AIRPORT REMARKS:** Attended Mon-Fri 1300-2300Z†, Sat-Sat 1300-2200Z†. Birds and deer on and invof arpt. Arpt CLOSED to air carrier ops with more than 30 passenger seats except PPR, call arpt manager 734-675-0155. Rwy 04 PAPI OTS indef. Rwy 04 REIL OTS indef. MIRL Rwy 04-22 and 17-35 preset low ints dusk-0400Z†; to increase ints and ACTIVATE after 0400Z†—CTAF. ACTIVATE REIL Rwy 04 and PAPI Rwy 17 and Rwy 35 and Rwy 22 and Rwy 04—CTAF.

**WEATHER DATA SOURCES:** AWOS-3 119.675 (734) 692-9686**COMMUNICATIONS:** CTAF/UNICOM 123.0

CARLETON RCO 122.1R 115.7T (LANSING RADIO)

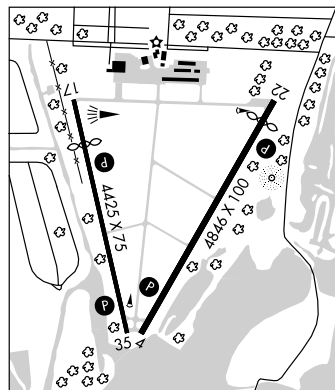
Ⓡ DETROIT APP/DEP CON 134.3 GCO 121.725 (DETROIT CLNC and LANSING FSS)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE LAN.

CARLETON (H) VORTAC 115.7 CRL Chan 104 N42°02.88' W83°27.45' 080° 13.6 NM to fld. 629/3W.

HIWAS.

NDB (MHW) 419 RYS N42°06.07' W83°09.18' at fld. NOTAM FILE ONZ.

**DEXTER****ACKLEBERRY** (2E8) 5 NW UTC-5(-4DT) N42°25.50' W83°52.16'

890 NOTAM FILE LAN

RWY 06-24: 2113X100 (TURF)

RWY 06: Thld dsplcd 315'. Trees.

RWY 24: Thld dsplcd 300'. Tree.

**AIRPORT REMARKS:** Attended irregularly. Snow removal limited, check rwy condition prior to use winter months. Rwy 06-24 marked with cones; dsplcd thlds marked with two cones each side. Rwy 06-24 NSTD LIRL due to color and configuration; not for public use.

**COMMUNICATIONS:** CTAF 122.9**DOUBLE JJ RESORT RANCH** (See ROTHBURY)**DOWAGIAC MUNI** (C91) 1 NW UTC-5(-4DT) N41°59.58' W86°07.70'

747 B FUEL 100LL TPA-1548(800) NOTAM FILE LAN

RWY 09-27: H4700X100 (ASPH) S-30, D-60 MIRL

RWY 09: REIL. VASI(V4L)—GA 3.0° TCH 35'. Trees.

RWY 27: REIL. PAPI(P4L)—GA 3.0° TCH 35'. Trees. Rgt tfc.

RWY 04-22: 2176X100 (TURF)

RWY 04: Trees. RWY 22: Thld dsplcd 388'. Tree. Rgt tfc.

**AIRPORT REMARKS:** Attended 1300Z†-dusk. Self svc fuel avbl 24 hrs. Numerous ultralights and acft with no radio on and invof arpt. Deer on and invof arpt. Model radio ctl acft opr E side of Rwy 04-22. ACTIVATE MIRL Rwy 09-27; VASI Rwy 09 and PAPI Rwy 27; and REIL Rwy 09 and 27-122.8. Rwy 04-22 and dspl thld marked with 3' yellow cones.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

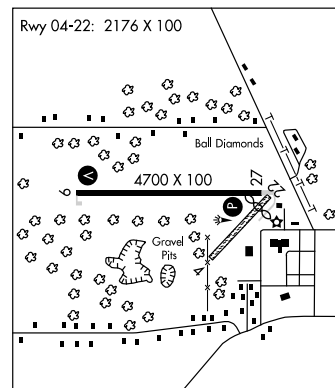
KEELER RCO 122.1R116.6T (LANSING RADIO)

Ⓡ SOUTH BEND APP/DEP CON 118.55 (Sun-Fri 1030-0500Z, Sat 1030-0445Z), other times ctc Ⓡ CHICAGO CENTER APP/DEP CON 127.55

**RADIO AIDS TO NAVIGATION:** NOTAM FILE LAN.

KEELER (L) VOR/DME 116.6 ELX Chan 113 N42°08.66'

W86°07.36' 182° 9.1 NM to fld. 795/OOE.



CHICAGO

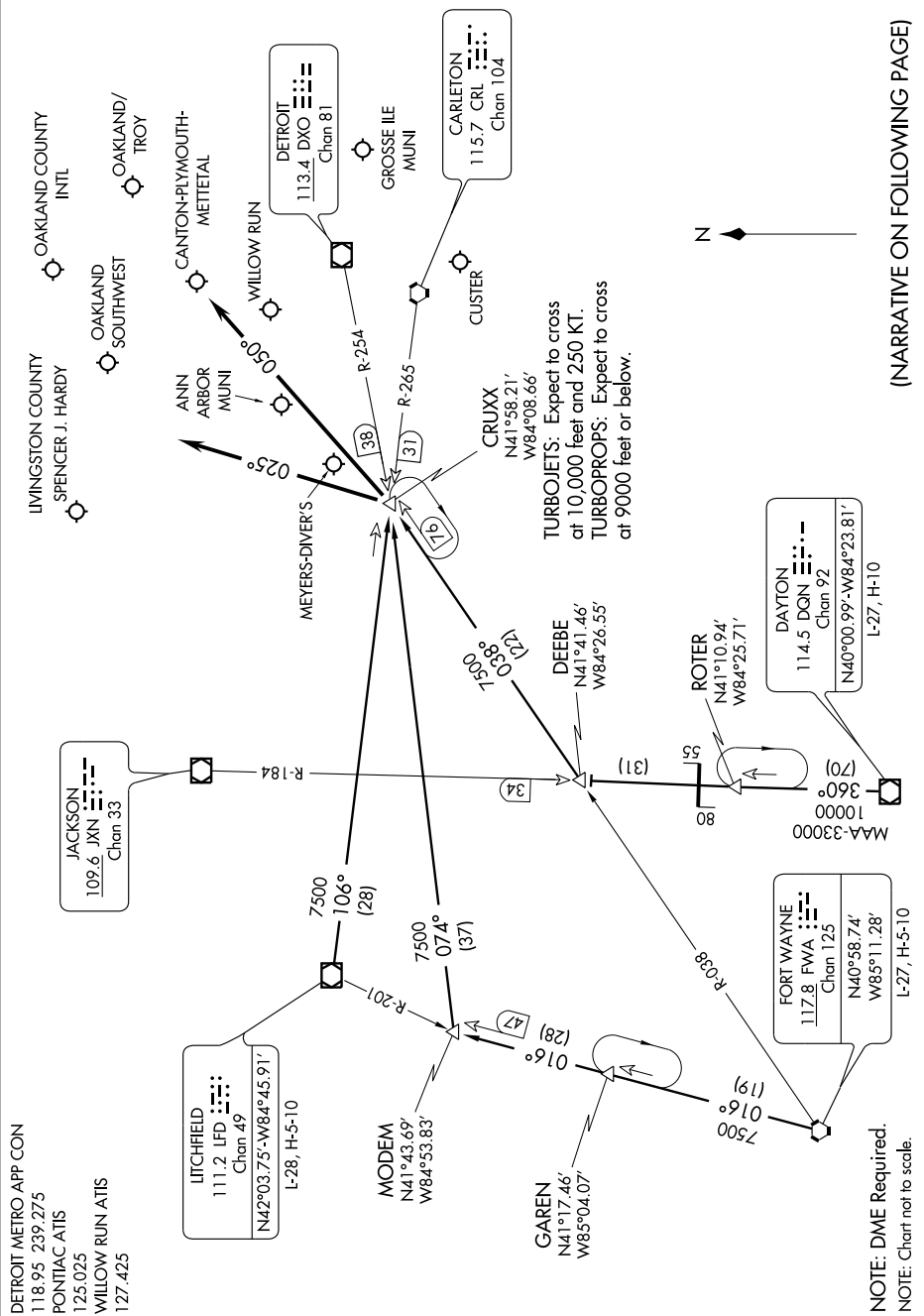
L-281

IAP

## CRUXX FOUR ARRIVAL

DETROIT, MICHIGAN

EC-1, 23 SEP 2010 to 21 OCT 2010



## CRUXX FOUR ARRIVAL

(CRUXX.CRUXX4) 10210

DETROIT, MICHIGAN

EC-1, 23 SEP 2010 to 21 OCT 2010



## CRUXX FOUR ARRIVAL (CRUXX.CRUX4)

DETROIT, MICHIGAN

## ARRIVAL DESCRIPTION

DAYTON TRANSITION (DQN.CRUX4): From over DQN VOR/DME via DQN R-360 and JXN R-184 to DEEBE INT and FWA R-038 to CRUXX INT. Thence . . . .

FORT WAYNE TRANSITION (FWA.CRUX4): From over FWA VORTAC via FWA R-016 to MODEM INT and DXO R-254 to CRUXX INT. Thence . . . .

LITCHFIELD TRANSITION (LFD.CRUX4): From over LFD VORTAC via LFD R-106 to CRUXX INT. Thence . . . .

. . . . Aircraft landing Y47, PTK, 0MI7, ØZW, ONZ, 1D2, TTF, VLL: From over CRUXX INT via 025° heading.

. . . . Aircraft landing YIP or ARB: From over CRUXX INT via 050° heading. Expect radar vector to final approach course.

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010

## NDB RWY 4

DETROIT / GROSSE ILE MUNI (ONZ)

NDB RYS <b>419</b>	APP CRS <b>044°</b>	Rwy Idg <b>4846</b> TDZE <b>590</b> Apt Elev <b>591</b>
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▼ Visibility reduction by helicopters NA. When local altimeter setting not received, use Detroit Metropolitan Wayne County altimeter setting and increase all MDA 40 feet. Increase AHLES fix minimums Circling Cat A, C, and D visibilities ¼ mile.

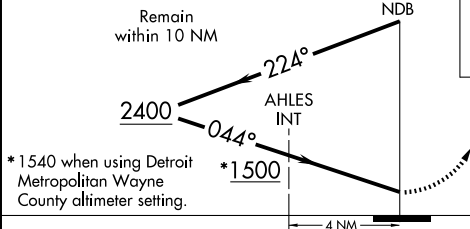
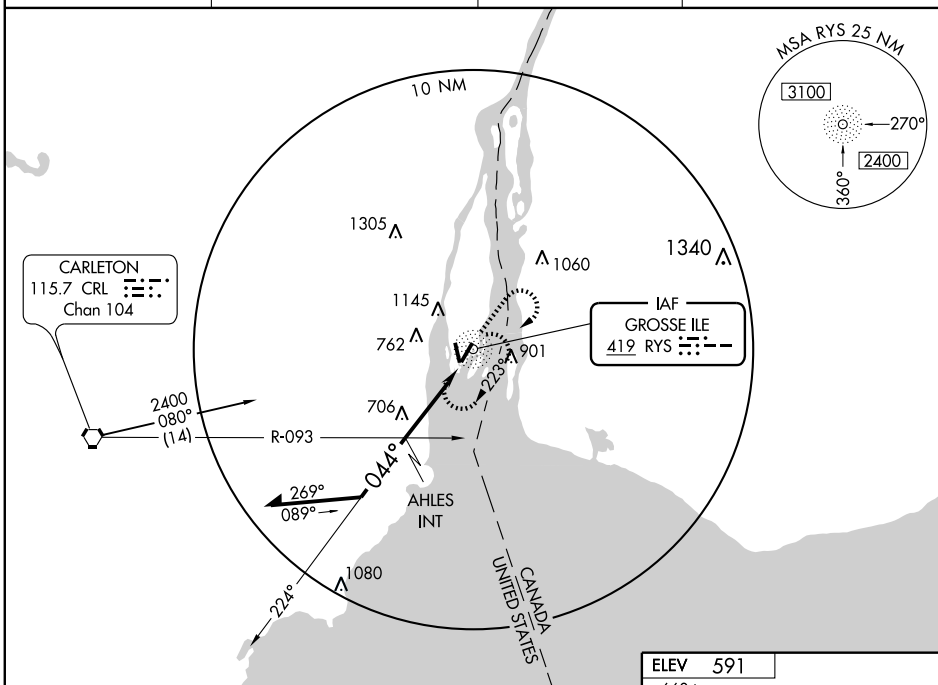
MISSED APPROACH: Climb to 1900 then climbing right turn to 2400 direct RYS NDB and hold.

AWOS-3  
**119.675**

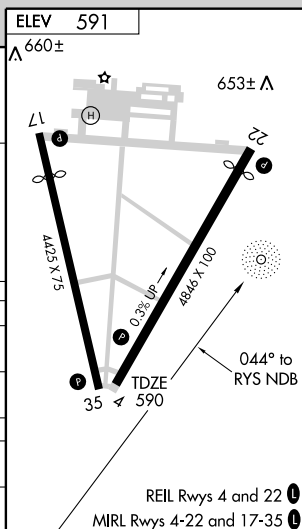
DETROIT APP CON  
**134.3 363.2**

GCO  
**121.725**

UNICOM  
**123.0 (CTAF) 0**



CATEGORY	A	B	C	D
S-4	1500-1¼	910 (1000-1¼)	1500 - 2¾ 910 (1000-2¾)	1500 - 3 910 (1000-3)
CIRCLING	1500-1¼	909 (1000-1¼)	1500 - 2¾ 909 (1000-2¾)	1500 - 3 909 (1000-3)
AHLES FIX MINIMUMS				
S-4	1140 - 1	550 (600-1)	1140 - 1½ 550 (600-1½)	1140 - 1¾ 550 (600-1¾)
CIRCLING	1460 - 1 869 (900-1)	1460 - 1¼ 869 (900-1¼)	1460 - 2½ 869 (900-2½)	1460 - 2¾ 869 (900-2¾)



DETROIT/GROSSE ILE, MICHIGAN

Amdt 2 09127

42°06'N - 83°10'W

DETROIT / GROSSE ILE MUNI (ONZ)

## NDB RWY 4

APP CRS	Rwy Idg	<b>4846</b>
<b>037°</b>	TDZE	<b>590</b>
	Apf Elev	<b>591</b>

# RNAV (GPS) RWY 4

DETROIT / GROSSE ILE MUNI (ONZ)

**▼** DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Detroit Metropolitan Wayne County altimeter setting and increase all MDA 40 feet and Circling visibilities Cat A, C, and D  $\frac{1}{4}$  mile.

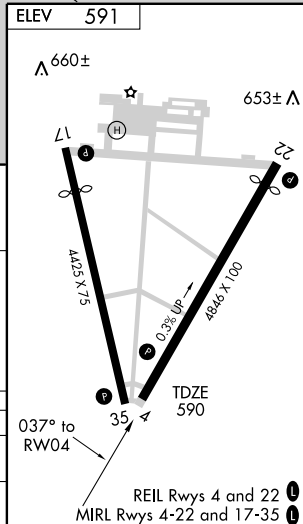
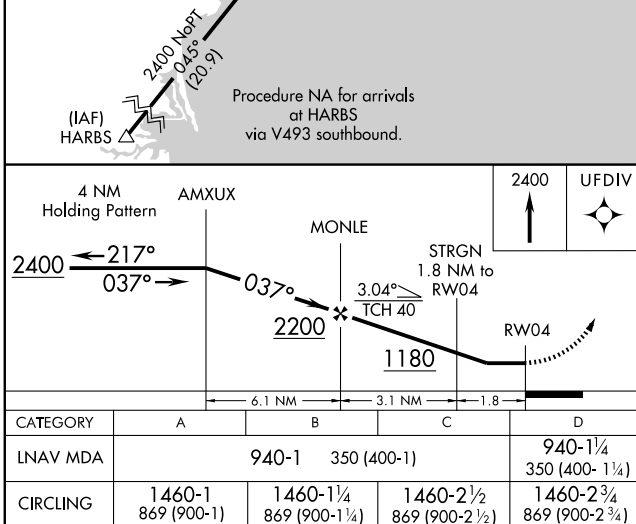
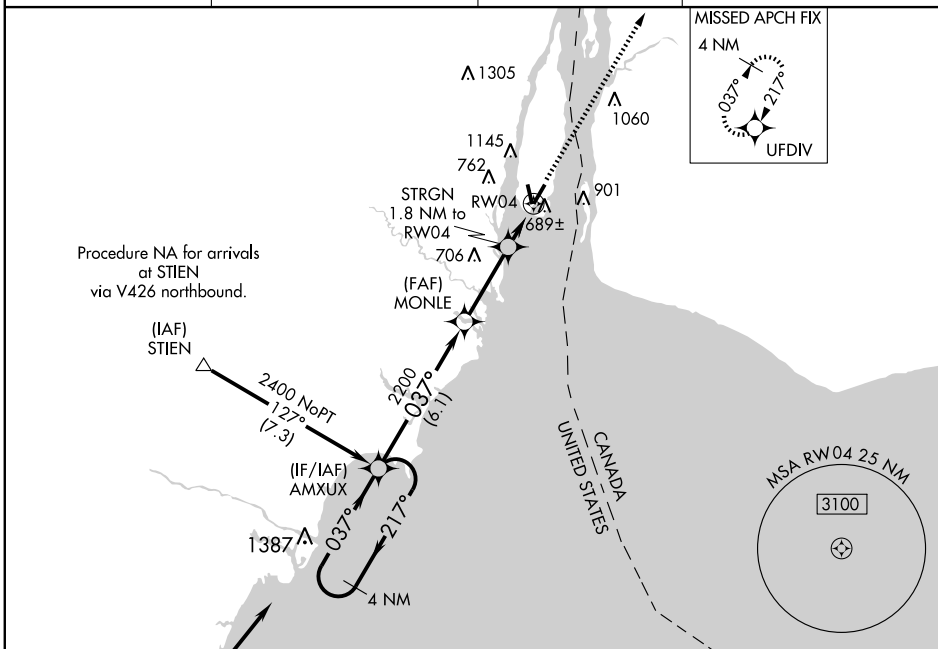
**MISSED APPROACH:**  
Climb to 2400 direct UFDIV and hold.

AWOS-3  
**119.675**

DETROIT APP CON  
**134.3 363.2**

GCO  
**121.725**

UNICOM  
**123.0 (CTAF)**





(SPRTN.SPRTN3) 10210

ST-118 (FAA)

## SPRTN THREE ARRIVAL

DETROIT, MICHIGAN

DETROIT APP CON

127.5 239.275

WILLOW RUN ATIS 127.425

PONTIAC ATIS 125.025

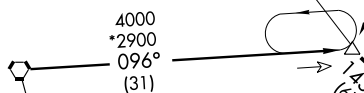
COLEMAN A. YOUNG ATIS 124.875

WINDSOR ATIS 134.5

SELFREDGE ATIS 125.325 270.1

SPRTN

N42°42.52'-W84°00.23'

VERTICAL NAVIGATION  
PLANNING INFORMATIONTURBOJETS/TURBOPROPS:  
Expect clearance to cross at  
9000'.LIVINGSTON COUNTY  
SPENCER J. HARDYPARKY  
N42°38.16'  
W83°54.57'

ANN ARBOR MUNI

DETROIT  
113.4 DXO  
Chan 81

MEYERS-DIVER'S

FLINT  
116.9 FNT  
Chan 116PONTIAC  
111.0 PSI  
Chan 47

ROMEO STATE

OAKLAND COUNTY  
INTLSELFREDGE  
ANG BASEOAKLAND/  
TROYCOLEMAN A.  
YOUNG MUNICANTON-  
PLYMOUTH-  
METTETAL

WINDSOR

GROSSE ILE  
MUNI

CLUSTER

NOTE: This Star for use at  
or above 9,000'.

NOTE: Chart not to scale.

EC-1, 23 SEP 2010 to 21 OCT 2010

LANSING TRANSITION (LAN.SPRTN3): From over LAN VORTAC via LAN R-096  
to SPRTN INT. Thence . . . .. . . . Aircraft landing: DET, PTK, VLL, D98, MTC, ARB, YIP, ONZ,  
1D2, TTF, Y47, 36MI, OZW, 3TE, YQG: From over SPRTN INT via DXO R-323  
to PARKY INT. Thence . . . .

. . . . Expect radar vectors to final approach course.

## SPRTN THREE ARRIVAL

DETROIT, MICHIGAN

(SPRTN.SPRTN3) 10210



**DETROIT/GROSSE ILE****GROSSE ILE MUNI** (ONZ) 2 S UTC-5(-4DT) N42°05.94' W83°09.69'

591 B S4 FUEL 100LL JET A TPA-1591(1000) NOTAM FILE ONZ

RWY 04-22: H4846X100 (CONC) S-66, D-83, 2D-105 MIRL 0.3% up NE

RWY 04: REIL. PAPI(P4L)—GA 3.0° TCH 38'. Rgt tfc.

RWY 22: REIL. PAPI (P4L)—GA 3.0° TCH 38'. Thld dsplcd 428'. Trees.

RWY 17-35: H4425X75 (CONC) S-40, D-55, 2D-90 MIRL

RWY 17: PAPI(P4L)—GA 3.0° TCH 26'. Thld dsplcd 675'. Trees.

RWY 35: PAPI(P4L)—GA 3.0° TCH 20'. Brush. Rgt tfc.

**AIRPORT REMARKS:** Attended Mon-Fri 1300-2300Z†, Sat-Sat 1300-2200Z†. Birds and deer on and invof arpt. Arpt CLOSED to air carrier ops with more than 30 passenger seats except PPR, call arpt manager 734-675-0155. Rwy 04 PAPI OTS indef. Rwy 04 REIL OTS indef. MIRL Rwy 04-22 and 17-35 preset low ints dusk-0400Z†; to increase ints and ACTIVATE after 0400Z†—CTAF. ACTIVATE REIL Rwy 04 and PAPI Rwy 17 and Rwy 35 and Rwy 22 and Rwy 04—CTAF.

**WEATHER DATA SOURCES:** AWOS-3 119.675 (734) 692-9686**COMMUNICATIONS:** CTAF/UNICOM 123.0

CARLETON RCO 122.1R 115.7T (LANSING RADIO)

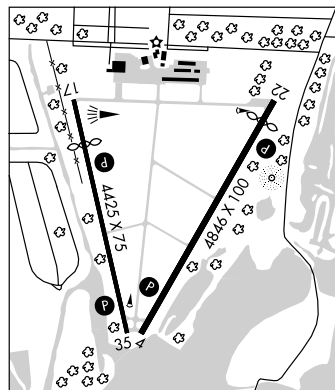
Ⓡ DETROIT APP/DEP CON 134.3 GCO 121.725 (DETROIT CLNC and LANSING FSS)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE LAN.

CARLETON (H) VORTAC 115.7 CRL Chan 104 N42°02.88' W83°27.45' 080° 13.6 NM to fld. 629/3W.

HIWAS.

NDB (MHW) 419 RYS N42°06.07' W83°09.18' at fld. NOTAM FILE ONZ.

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890 NOTAM FILE LAN

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RWY 06: Thld dsplcd 315'. Trees.

RWY 24: Thld dsplcd 300'. Tree.

**AIRPORT REMARKS:** Attended irregularly. Snow removal limited, check rwy condition prior to use winter months. Rwy 06-24 marked with cones; dsplcd thlds marked with two cones each side. Rwy 06-24 NSTD LIRL due to color and configuration; not for public use.

**COMMUNICATIONS:** CTAF 122.9**DOUBLE JJ RESORT RANCH** (See ROTHBURY)**DOWAGIAC MUNI** (C91) 1 NW UTC-5(-4DT) N41°59.58' W86°07.70'

747 B FUEL 100LL TPA-1548(800) NOTAM FILE LAN

RWY 09-27: H4700X100 (ASPH) S-30, D-60 MIRL

RWY 09: REIL. VASI(V4L)—GA 3.0° TCH 35'. Trees.

RWY 27: REIL. PAPI(P4L)—GA 3.0° TCH 35'. Trees. Rgt tfc.

RWY 04-22: 2176X100 (TURF)

RWY 04: Trees. RWY 22: Thld dsplcd 388'. Tree. Rgt tfc.

**AIRPORT REMARKS:** Attended 1300Z†-dusk. Self svc fuel avbl 24 hrs. Numerous ultralights and acft with no radio on and invof arpt. Deer on and invof arpt. Model radio ctl acft opr E side of Rwy 04-22. ACTIVATE MIRL Rwy 09-27; VASI Rwy 09 and PAPI Rwy 27; and REIL Rwy 09 and 27-122.8. Rwy 04-22 and dspl thld marked with 3' yellow cones.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

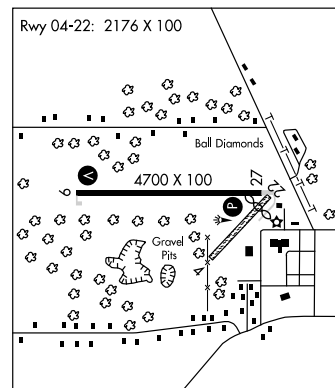
KEELER RCO 122.1R116.6T (LANSING RADIO)

Ⓡ SOUTH BEND APP/DEP CON 118.55 (Sun-Fri 1030-0500Z, Sat 1030-0445Z), other times ctc Ⓡ CHICAGO CENTER APP/DEP CON 127.55

**RADIO AIDS TO NAVIGATION:** NOTAM FILE LAN.

KEELER (L) VOR/DME 116.6 ELX Chan 113 N42°08.66'

W86°07.36' 182° 9.1 NM to fld. 795/OOE.

**CHICAGO**

L-281

IAP

APP CRS	Rwy ldg	<b>4700</b>
<b>095°</b>	TDZE	<b>740</b>
	Apt Elev	<b>747</b>

# RNAV (GPS) RWY 9

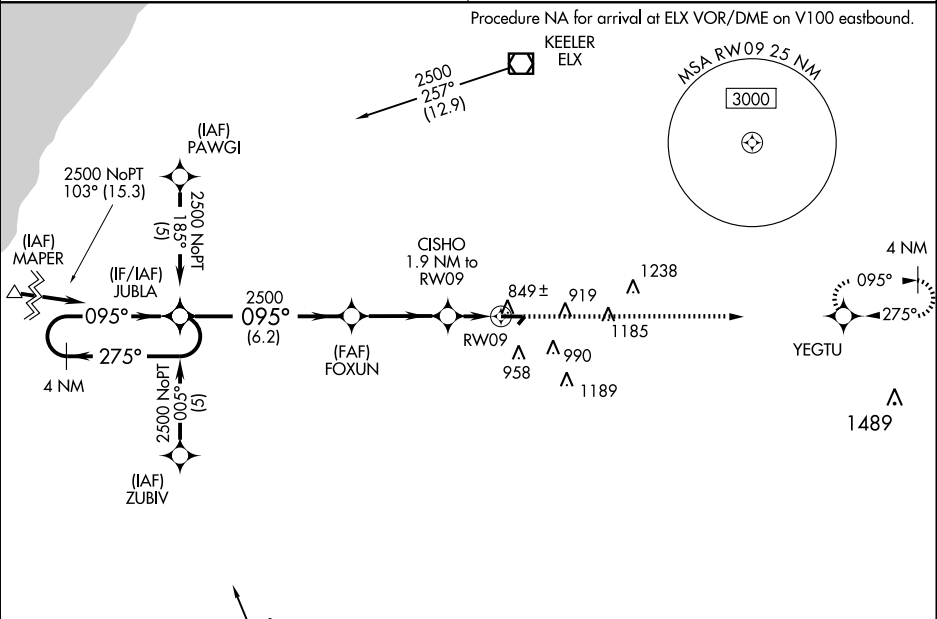
DOWAGIAC MUNI (C91)

**▽** DME/DME RNP-0.3 NA. Procedure NA at night.  
**▲** NA Visibility reduction by helicopters NA. Obtain local altimeter setting on CTAF, when not received, use Elkhart altimeter setting and increase all MDA 60 feet; increase LNAV and circling Cat C visibility ¼ mile.

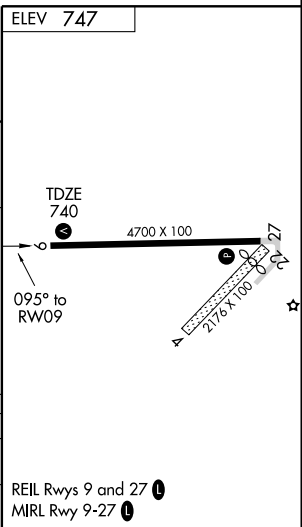
MISSED APPROACH: Climb to 2700 direct YEGTU and hold.

SOUTH BEND APP CON ★  
**118.55 257.8**

UNICOM  
**122.8 (CTAF)**



CATEGORY	A	B	C	D
LNAV MDA	1100-1 360 (400-1)			1100-1¼ 360 (400-1¼)
CIRCLING	1320-1 573 (600-1)		1340-1½ 593 (600-1½)	1340-2 593 (600-2)





APP CRS **275°**  
 Rwy ldg **4700**  
 TDZE **747**  
 Apt Elev **747**

# RNAV (GPS) RWY 27

DOWAGIAC MUNI (C91)

**NA** DME/DME RNP-0.3 NA. Procedure NA at night. Visibility reduction by helicopters NA. Obtain local altimeter setting on CTAF, when not received, use Elkhart altimeter setting and increase all MDA 60 feet; increase circling Cat C visibility ¼ mile.

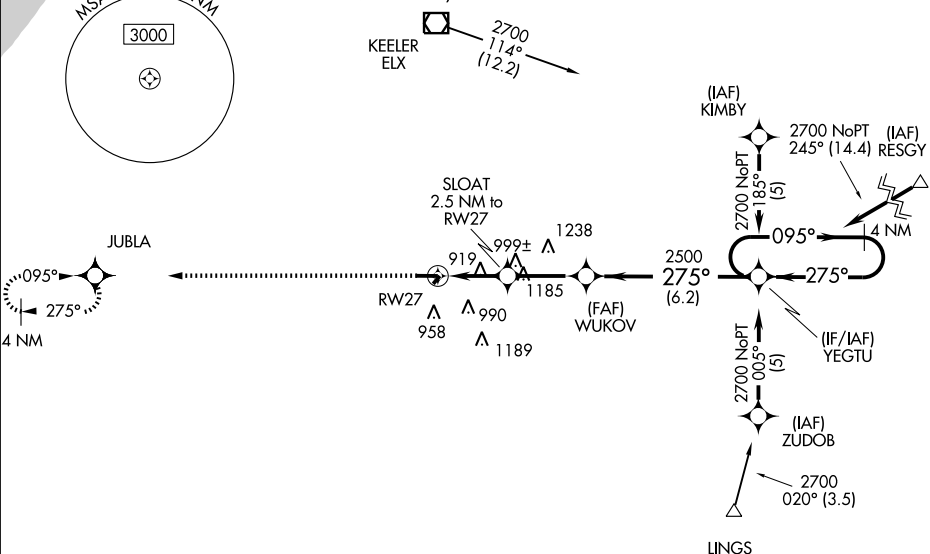
MISSED APPROACH: Climb to 2500 direct JUBLA and hold.

SOUTH BEND APP CON ★  
**118.55 257.8**

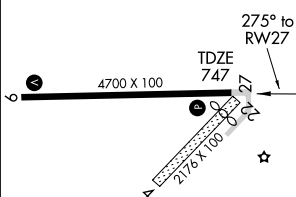
UNICOM  
**122.8 (CTAF) 0**

Procedure NA for arrival on ELX  
 VOR/DME airway radials 061 CW 077.

Procedure NA for arrivals at  
 RESGY on V285 northbound.



ELEV 747



REIL Rwy 9 and 27 0  
 MRL Rwy 9-27 0

2500 JUBLA		4 NM Holding Pattern	
SLOAT 2.5 NM to RW27		WUKOV	
RW27		YEGTU	
1580		095° 2700	
2.5 NM		2.8 NM	
CATEGORY		A	
LNAV MDA		1260-1 513 (600-1)	
CIRCLING		1320-1 573 (600-1)	
CATEGORY		B	
LNAV MDA		1260-1½ 513 (600-1½)	
CIRCLING		1340-1½ 593 (600-1½)	
CATEGORY		C	
LNAV MDA		1260-1¾ 513 (600-1¾)	
CIRCLING		1340-2 593 (600-2)	
CATEGORY		D	
LNAV MDA		1260-1¾ 513 (600-1¾)	
CIRCLING		1340-2 593 (600-2)	

VOR/DME ELX <b>116.6</b> Chan <b>113</b>	APP CRS <b>181°</b>	Rwy Idg TDZE Apt Elev	<b>N/A</b> <b>N/A</b> <b>747</b>
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**VOR-A**

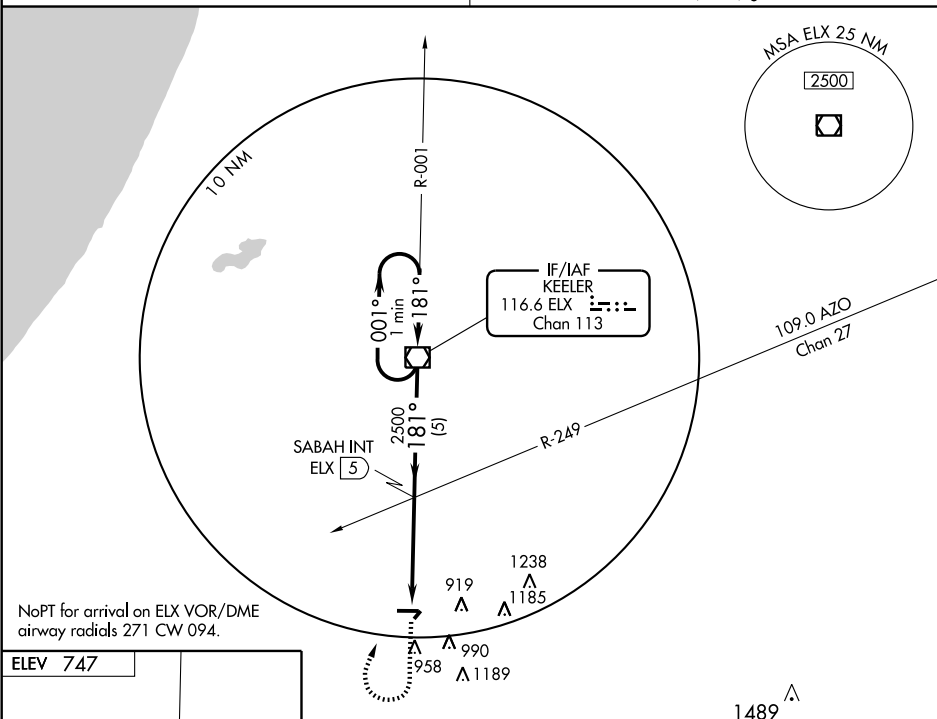
DOWAGIAC MUNI (C91)

▼ Circling to Rwy 9 NA at night. Visibility reduction by helicopters NA.  
 ▲ NA Obtain local altimeter setting on CTAF; when not received, use Elkhart  
 altimeter setting and increase all MDA 60 feet; increase circling Cat C  
 visibility ¼ mile.

MISSED APPROACH: Climb to 2500  
 then right turn direct ELX VOR/DME  
 and hold.

SOUTH BEND APP CON \*  
**118.55 257.8**

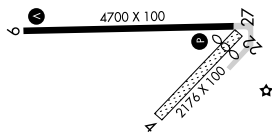
UNICOM  
**122.8 (CTAF) 0**



NoPT for arrival on ELX VOR/DME  
 airway radials 271 CW 094.

ELEV 747

181° 4 NM  
 from FAF

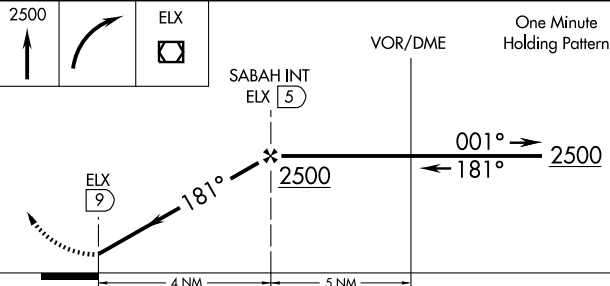


REIL Rwy 9 and 27

MIRL Rwy 9-27

FAF to MAP 4 NM

Knots	60	90	120	150	180
Min:Sec	4:00	2:40	2:00	1:36	1:20



CATEGORY	A	B	C	D
CIRCLING	1320-1 573 (600-1)		1340-1½ 593 (600-1½)	1340-2 593 (600-2)

DOWAGIAC, MICHIGAN

Amdt 10 29JUL10

DOWAGIAC MUNI (C91)

**VOR-A**

42°00'N - 86°08'W

**DRUMMOND ISLAND** (DRM) 1 SW UTC-5(-4DT) N46°00.56' W83°44.64'

LAKE HURON

668 B S4 FUEL 100LL, JET A, MOGAS OX 1, 3 LRA NOTAM FILE DRM

L-31C

RWY 08-26: H4000X75 (ASPH) MIRL

IAP

RWY 08: PAPI(P2L)—GA 3.0° TCH 35'. Thld dsplcd 650'. Trees.

RWY 26: PAPI(P2L)—GA 3.0° TCH 25'. Thld dsplcd 170'. Road.

RWY 18-36: 2500X150 (TURF)

RWY 18: Trees.

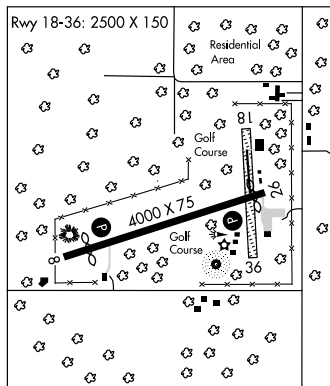
RWY 36: Trees.

**AIRPORT REMARKS:** Attended Mon-Sat 1300-2200Z±. Birds and deer invof arpt. Occasional golf carts and pedestrians crossing Rwy 08-26 due to golf course on both sides. Rwy 18-36 marked with 3' yellow cones. Rwy 18-36 center 20' portion of rwy from intersection Rwy 18-36 N to the hangar line is asph; remainder of rwy turf. ACTIVATE MIRL Rwy 08-26 and PAPI Rwy 08 and 26—CTAF. Flight Notification Service (ADCUS) available.

**WEATHER DATA SOURCES:** AWOS-3 118.325 (906) 493-6410.**COMMUNICATIONS:** CTAF/UNICOM 122.8Ⓡ **TORONTO CENTER APP/DEP CON** 132.65**RADIO AIDS TO NAVIGATION:** NOTAM FILE CIU.

**SAULT STE MARIE (H) VOR/DME** 112.2 SSM Chan 59 N46°24.73' W84°18.89' 139° 33.9 NM to fld. 687/4W.

**NDB (MHW)** 218 DRM N46°00.44' W83°44.53' at fld. NOTAM FILE DRM. Unmonitored.

**DUFORD FLD** (See GENESSEE)**DUPONT-LAPEER** (See LAPEER)**EAST JORDAN CITY** (Y94) 2 SE UTC-5(-4DT) N45°07.81' W85°06.40'

GREEN BAY

642 NOTAM FILE LAN

L-31B

RWY 09-27: H3250X50 (ASPH) MIRL

RWY 09: Road. RWY 27: VASI(V2L)—GA 4.0° TCH 32'. Thld dsplcd 125'. Road.

RWY 18-36: 1800X120 (TURF)

RWY 18: Trees.

RWY 36: Trees.

**AIRPORT REMARKS:** Unattended. Birds and deer on and invof arpt. Rwy 18-36 CLOSED indef. 1670' MSL tower 3 NM NE. Rwy 18-36 marked with 3' yellow cones. Rwy 18-36 surface rough with bare spots. N-S twy rough with sand and bare spots. ACTIVATE MIRL Rwy 9-27 and VASI Rwy 27—122.8.

**COMMUNICATIONS:** CTAF 122.9**GAYLORD RCO** 122.55 (LANSING RADIO)**RADIO AIDS TO NAVIGATION:** NOTAM FILE LAN.

**GAYLORD (L) VORW/DME** 109.2 GLR Chan 29 N45°00.75' W84°42.26' 299° 18.5 NM to fld. 1318/4W.

**EAST TAWAS****IOSCO CO** (6D9) 3 NE UTC-5(-4DT) N44°18.77' W83°25.34'

LAKE HURON

606 B S4 FUEL 100LL NOTAM FILE LAN

L-31C

RWY 08-26: H4802X75 (ASPH) S-12 MIRL

IAP

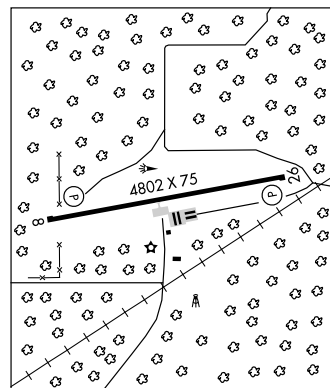
RWY 08: REIL. PAPI(P2L)—GA 3.0° TCH 33'. Tree.

RWY 26: REIL. PAPI(P2L)—GA 3.0° TCH 33'. Trees.

**AIRPORT REMARKS:** Attended Mon-Fri 1400-2300Z±, Sundays on call 989-362-4515. For airframe repairs call 989-362-4515. Parachute Jumping. Numerous deer on and invof arpt. ACTIVATE MIRL Rwy 08-26—122.85.

**COMMUNICATIONS:** CTAF/UNICOM 122.8Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 125.475**RADIO AIDS TO NAVIGATION:** NOTAM FILE OSC.

**AU SABLE (H) VORW/DME** 116.1 ASP Chan 108 N44°26.95' W83°23.66' 195° 8.3 NM to fld. 625/7W.



NDB DRM  
**218**

APP CRS  
250°

Rwy Idg	<b>3830</b>
TDZE	<b>661</b>
Apt Elev	<b>668</b>

NDB RWY 26  
DRUMMOND ISLAND (DRM)



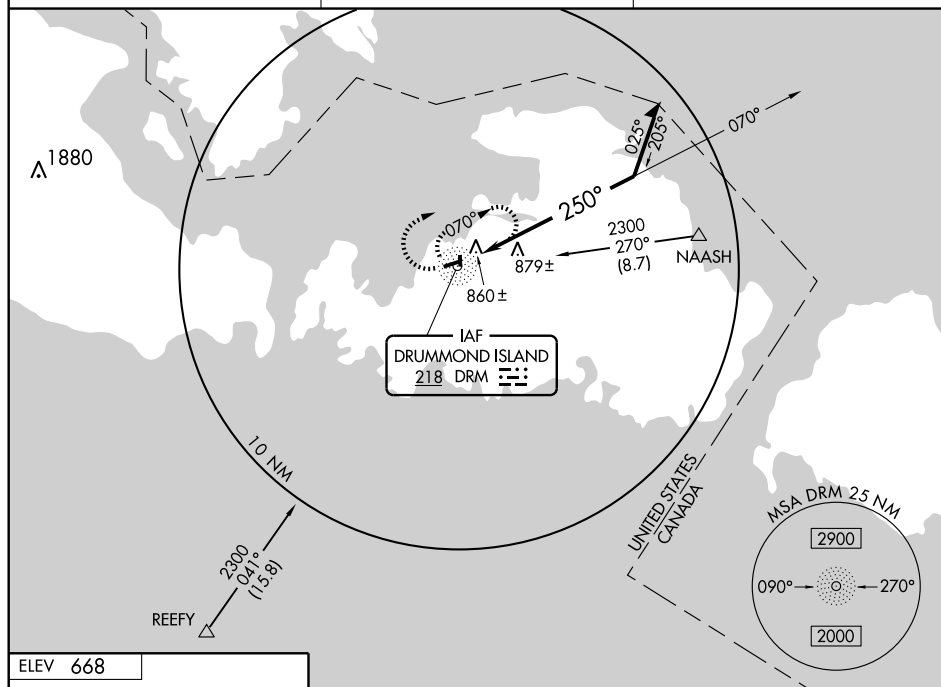
Obtain local altimeter setting on CTAF; when not received, use Sault Ste Marie Chippewa County Intl altimeter setting.

**MISSED APPROACH:** Climbing right turn to 2300 in DRM NDB holding pattern.

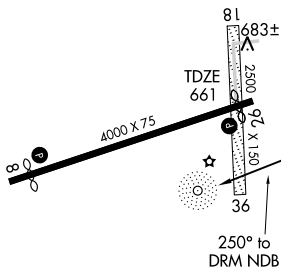
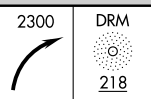
AWOS-3  
118,325

TORONTO CENTER  
132.65 344.5

UNICOM  
122.8 (CTAF) **L**



ELEV 668



CATEGORY	A	B	C	D
S-26	1220-1	559 (600-1)	1220-1½ 559 (600-1½)	NA
CIRCLING	1220-1	552 (600-1)	1220-1½ 552 (600-1½)	NA
SAULT STE MARIE CHIPPEWA CO INTL ALTIMETER MINIMA				
S-26	1320-1	659 (700-1)	1320-1¾ 659 (700-1¾)	NA
CIRCLING	1320-1	652 (700-1)	1320-1¾ 652 (700-1¾)	NA

DRUMMOND ISLAND, MICHIGAN  
Amdt 1 10042

46°01'N - 83°45'W

DRUMMOND ISLAND (DRM)  
NDB RWY 26

EC-1. 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010

# RNAV (GPS) RWY 8

## DRUMMOND ISLAND (DRM)

APP CRS <b>079°</b>	Rwy Idg TDZE Apt Elev	<b>3350</b> <b>661</b> <b>668</b>
------------------------	-----------------------------	---

▼ DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. Circling to Rwy 18-36 NA. When local altimeter setting not received, use Sault Ste Marie altimeter setting and increase all MDA 100 feet, increase LNAV Cat C visibility ¼ mile.

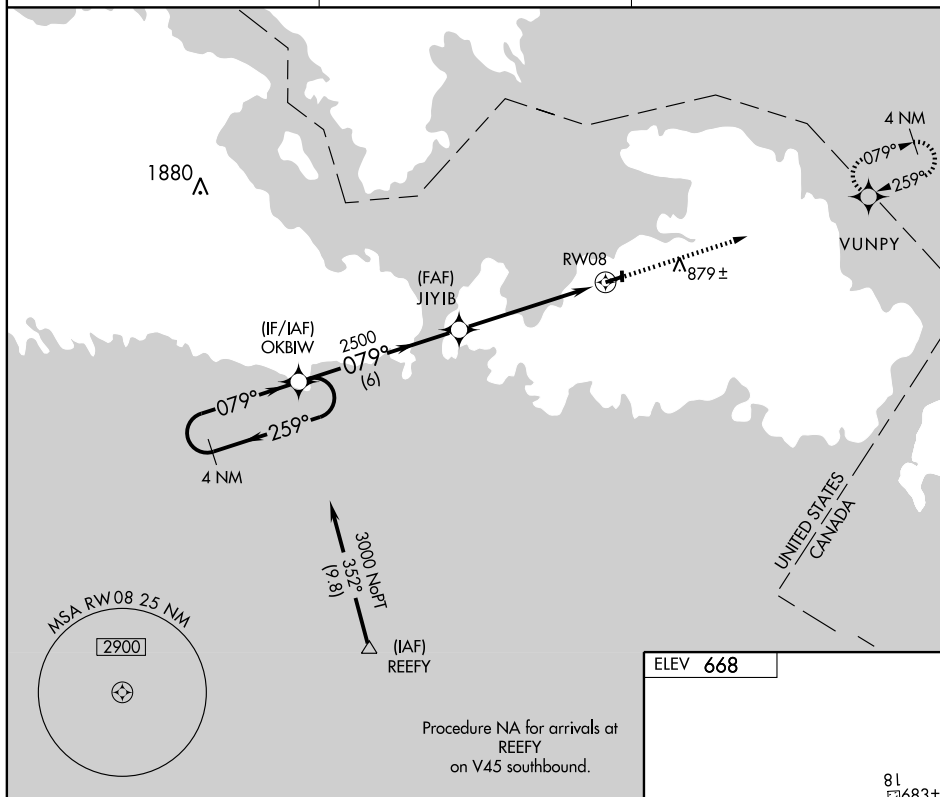
▲

MISSED APPROACH: Climb to 2500 direct VUNPY and hold.

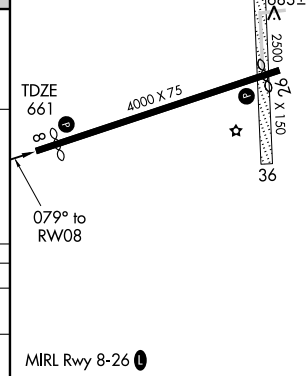
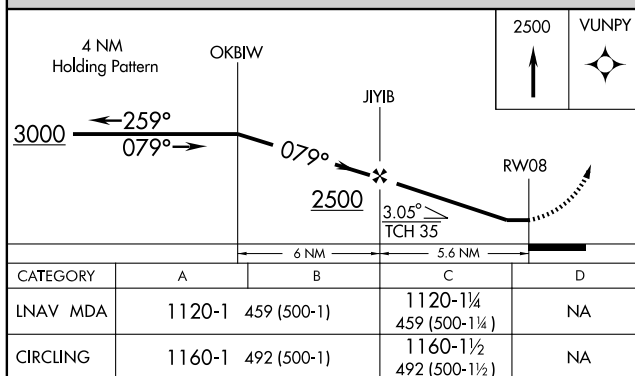
AWOS-3  
**118.325**

TORONTO CENTER  
**132.65 344.5**

UNICOM  
**122.8 (CTAF) 0**



ELEV **668**





**DRUMMOND ISLAND** (DRM) 1 SW UTC-5(-4DT) N46°00.56' W83°44.64'

LAKE HURON

668 B S4 FUEL 100LL, JET A, MOGAS OX 1, 3 LRA NOTAM FILE DRM

L-31C

RWY 08-26: H4000X75 (ASPH) MIRL

IAP

RWY 08: PAPI(P2L)—GA 3.0° TCH 35'. Thld dsplcd 650'. Trees.

RWY 26: PAPI(P2L)—GA 3.0° TCH 25'. Thld dsplcd 170'. Road.

RWY 18-36: 2500X150 (TURF)

RWY 18: Trees.

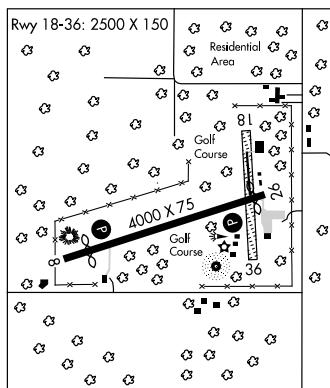
RWY 36: Trees.

**AIRPORT REMARKS:** Attended Mon-Sat 1300-2200Z±. Birds and deer invof arpt. Occasional golf carts and pedestrians crossing Rwy 08-26 due to golf course on both sides. Rwy 18-36 marked with 3' yellow cones. Rwy 18-36 center 20' portion of rwy from intersection Rwy 18-36 N to the hangar line is asph; remainder of rwy turf. ACTIVATE MIRL Rwy 08-26 and PAPI Rwy 08 and 26—CTAF. Flight Notification Service (ADCUS) available.

**WEATHER DATA SOURCES:** AWOS-3 118.325 (906) 493-6410.**COMMUNICATIONS:** CTAF/UNICOM 122.8Ⓡ **TORONTO CENTER APP/DEP CON** 132.65**RADIO AIDS TO NAVIGATION:** NOTAM FILE CIU.

**SAULT STE MARIE (H) VOR/DME** 112.2 SSM Chan 59 N46°24.73' W84°18.89' 139° 33.9 NM to fld. 687/4W.

**NDB (MHW)** 218 DRM N46°00.44' W83°44.53' at fld. NOTAM FILE DRM. Unmonitored.

**DUFORD FLD** (See GENESSEE)**DUPONT-LAPEER** (See LAPEER)**EAST JORDAN CITY** (Y94) 2 SE UTC-5(-4DT) N45°07.81' W85°06.40'

GREEN BAY

642 NOTAM FILE LAN

L-31B

RWY 09-27: H3250X50 (ASPH) MIRL

RWY 09: Road.

RWY 27: VASI(V2L)—GA 4.0° TCH 32'. Thld dsplcd 125'. Road.

RWY 18-36: 1800X120 (TURF)

RWY 18: Trees.

RWY 36: Trees.

**AIRPORT REMARKS:** Unattended. Birds and deer on and invof arpt. Rwy 18-36 CLOSED indef. 1670' MSL tower 3 NM NE. Rwy 18-36 marked with 3' yellow cones. Rwy 18-36 surface rough with bare spots. N-S twy rough with sand and bare spots. ACTIVATE MIRL Rwy 9-27 and VASI Rwy 27—122.8.

**COMMUNICATIONS:** CTAF 122.9**GAYLORD RCO** 122.55 (LANSING RADIO)**RADIO AIDS TO NAVIGATION:** NOTAM FILE LAN.

**GAYLORD (L) VORW/DME** 109.2 GLR Chan 29 N45°00.75' W84°42.26' 299° 18.5 NM to fld. 1318/4W.

**EAST TAWAS****IOSCO CO** (6D9) 3 NE UTC-5(-4DT) N44°18.77' W83°25.34'

LAKE HURON

606 B S4 FUEL 100LL NOTAM FILE LAN

L-31C

RWY 08-26: H4802X75 (ASPH) S-12 MIRL

IAP

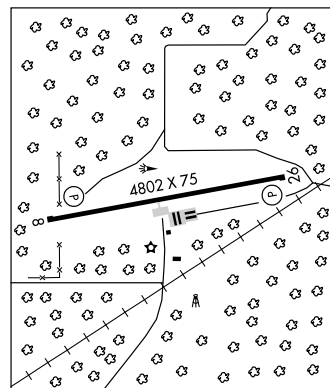
RWY 08: REIL. PAPI(P2L)—GA 3.0° TCH 33'. Tree.

RWY 26: REIL. PAPI(P2L)—GA 3.0° TCH 33'. Trees.

**AIRPORT REMARKS:** Attended Mon-Fri 1400-2300Z±, Sundays on call 989-362-4515. For airframe repairs call 989-362-4515. Parachute Jumping. Numerous deer on and invof arpt. ACTIVATE MIRL Rwy 08-26—122.85.

**COMMUNICATIONS:** CTAF/UNICOM 122.8Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 125.475**RADIO AIDS TO NAVIGATION:** NOTAM FILE OSC.

**AU SABLE (H) VORW/DME** 116.1 ASP Chan 108 N44°26.95' W83°23.66' 195° 8.3 NM to fld. 625/7W.



VOR/DME ASP  
**116.1**  
Chan **108**

APP CRS  
**194°**

Rwy Idg  
TDZE  
Apt Elev **606**

**VOR or GPS-A**

EAST TAWAS/ IOSCO COUNTY (6D9)

**V** Use Oscoda-Wurtsmith altimeter setting.

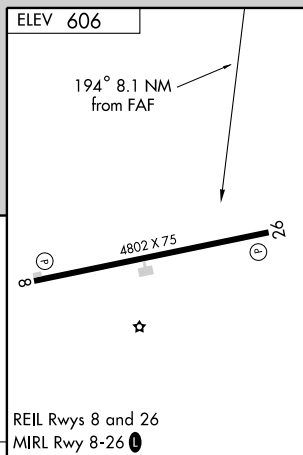
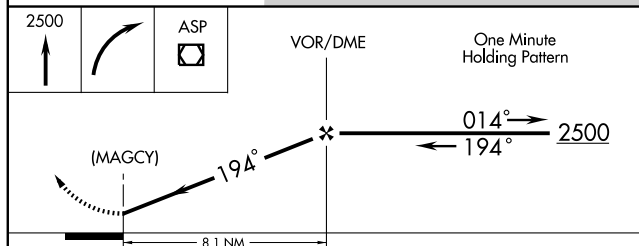
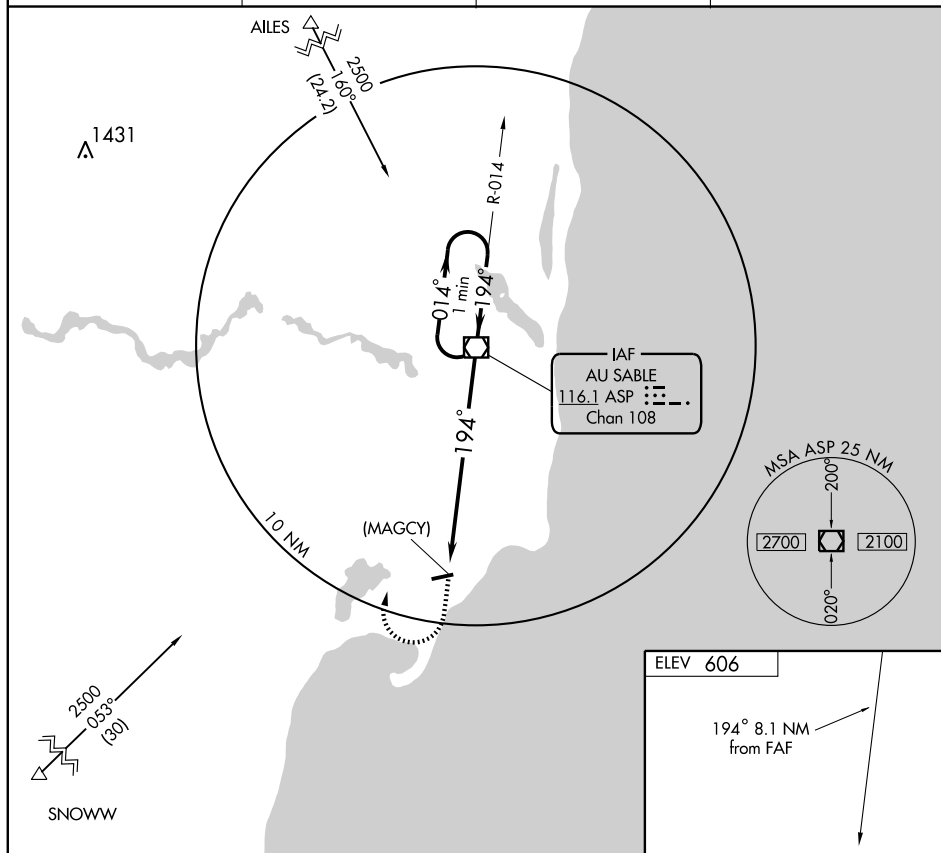
**Δ** NA

MISSED APPROACH: Climb to 2500 then right turn direct ASP VOR/DME and hold.

OSCODA-WURTSMITH  
AWOS-3  
**116.1**

MINNEAPOLIS CENTER  
**125.475 269.45**

UNICOM  
**122.8** (CTAF)

**122.85 0**

CATEGORY	A	B	C	D
CIRCLING	1120 - 1	514 (600-1)	1120 - 1½ 514 (600-1½)	1280 - 2¼ 674 (700-2¼)

FAF to MAP 8.1 NM					
Knots	60	90	120	150	180
Min:Sec	8:06	5:24	4:03	3:14	2:42



## EASTPORT

TORCHPORT (59M) 3 S UTC-5(-4DT) N45°03.35' W85°21.36'

GREEN BAY

640 NOTAM FILE LAN

RWY 09-27: 3300X100 (TURF)

RWY 09: Road. RWY 27: Thld dsplcd 1200'. Trees.

RWY 04-22: 2600X100 (TURF)

RWY 04: Tree. RWY 22: Thld dsplcd 600'. Road.

**AIRPORT REMARKS:** Unattended. No snow removal; 110 V outlets for ski equipped acft. Rwy 09-27 and Rwy 04-22 dsplcd thlds marked with cones. Rwy 09 uneven rolling terrain.

COMMUNICATIONS: CTAF: 122.9

## EATON RAPIDS

SKYWAY ESTATES (60G) 4 N UTC-5(-4DT) N42°35.02' W84°39.08'

DETROIT

931 B NOTAM FILE LAN

L-28J

RWY 08-26: 2653X100 (TURF) MIRL

IAP

RWY 08: Thld dsplcd 685'. Trees.

RWY 26: Thld dsplcd 200'. Trees.

**AIRPORT REMARKS:** Unattended. Verify arpt condition during winter and spring; call 517-663-2471. Aerobatic box N of Rwy 08-26. Aerobatic practice area in 3 NM radius of arpt during dalgt hrs; 1500' AGL to 6000' MSL. Check with Lansing twr. Rwy 26 also, apch ratio 12:1 over 28' tree, 345' distance, 15' left. ACTIVATE MIRL Rwy 08-26—CTAF. Rwy 08-26 and dsplcd thlds marked with 3' yellow cones. NOTE: See Special Notices—Aerobatic Practice Area.

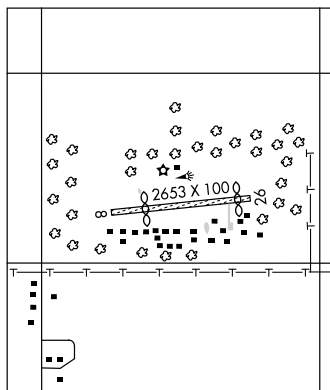
COMMUNICATIONS: CTAF 122.9

LANSING APP/DEP CON 118.65

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

LANSING (L) VORTACW 110.8 LAN Chan 45 N42°43.04'

W84°41.85' 171° 8.3 NM to fld. 887/5W.



EDWARD F JOHNSON (See ISHPMEMING)

## ELK RAPIDS

YUBA (34U) 4 S UTC-5(-4DT) N44°50.33' W85°25.87'

GREEN BAY

645 NOTAM FILE LAN

RWY 18-36: 2975X100 (TURF)

RWY 18: Trees. RWY 36: P-line.

**AIRPORT REMARKS:** Unattended. Arpt CLOSED Nov thru Apr. Deer and birds invof arpt. Rwy rough, uneven, rolling, grass may not be mowed. Trucks parked on rwy edge south end. Orchard/crops both sides of rwy. Rwy slopes down from S to N.

COMMUNICATIONS: CTAF 122.9

## ELWELL

HAMP (68R) 3 W UTC-5(-4DT) N43°23.97' W84°48.05'

DETROIT

825 S4 NOTAM FILE LAN

RWY 09-27: 2580X100 (TURF)

RWY 09: Thld dsplcd 1180'. Pole. RWY 27: Trees.

**AIRPORT REMARKS:** Attended continuously. Rwy 09-27 rolling terrain. Rwy 09-27 and dsplcd thlds marked with 3' yellow cones. NSTD rwy lighting, for local use only.

COMMUNICATIONS: CTAF 122.9

## EMMETT

SHARPE'S STRIP (2E2) 2 N UTC-5(-4DT) N42°57.10' W82°46.56'

DETROIT

810 NOTAM FILE LAN

RWY 18-36: 2700X90 (TURF)

RWY 18: Thld dsplcd 700'. P-line. RWY 36: Trees.

**AIRPORT REMARKS:** Attended irregularly. Deer and turkeys invof arpt. Rwy 18 and Rwy 36 and dsplcd thld marked with yellow cones.

COMMUNICATIONS: CTAF 122.9

VORTAC LAN <b>110.8</b> Chan <b>45</b>	APP CRS <b>171°</b>	Rwy Idg TDZE Apt Elev <b>N/A</b> <b>N/A</b> <b>931</b>
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**VOR or GPS-A**

EATON RAPIDS / SKYWAY ESTATES (60G)

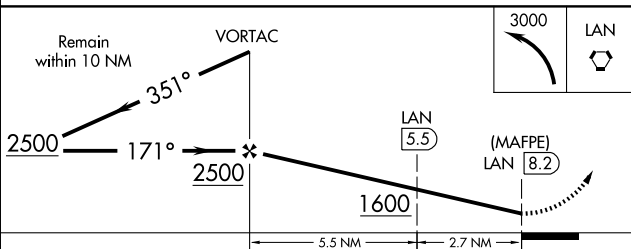
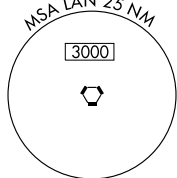
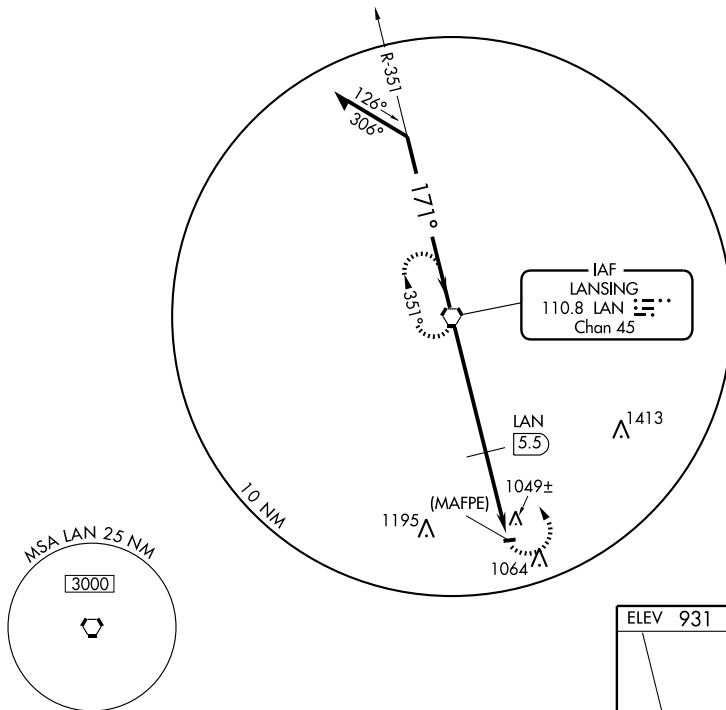


Use Lansing altimeter setting.

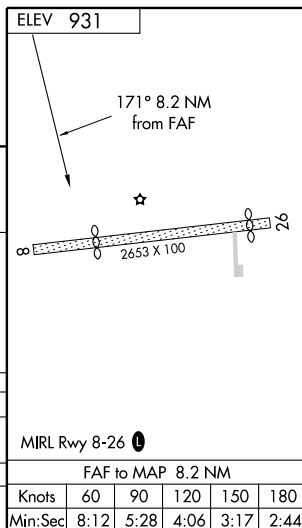
MISSED APPROACH: Climbing left turn to 3000 direct LAN VORTAC and hold.

LANSING APP CON  
**118.65 226.4**

CTAF  
**122.9 0**



CATEGORY	A	B	C	D
CIRCLING	1680-1 749 (800-1)	1680-1¼ 749 (800-1¼)	NA	
DME MINIMUMS				
CIRCLING	1480-1	549 (600-1)	NA	



**EMPIRE** (Y87) 3 SE UTC-5(-4DT) N44°47.25' W86°00.26'

GREEN BAY

944 NOTAM FILE LAN

**RWY 17-35:** H2600X50 (ASPH) S-12.5 LIRL

**RWY 17:** Thld dsplcd 718'. Trees.

**RWY 35:** Thld dsplcd 182'. Trees.

**RWY 09-27:** 2275X150 (TURF)

**RWY 09:** Thld dsplcd 200'. Trees.

**RWY 27:** Thld dsplcd 280'. Road.

**AIRPORT REMARKS:** Unattended. Rwy 09-27 CLOSED Dec thru Mar and when snow covered, no snow removal.

Ultralight and radio control activity on and in/ovf arpt. Rwy 17-35 loose stones on rwy. Rwy 09-27 uneven rolling terrain. Campground adjacent to arpt; call 231-326-5285. Rwy 09-27 and dsplcd thlds marked with 3' yellow cones. Rwy 35 windsock 110' E of rwy centerline. LIRL Rwy 17-35 inoperative Nov-May. ACTIVATE LIRL Rwy 17-35 Jun-Oct—CTAF.

**COMMUNICATIONS:** CTAF 122.9

**ERIE AERODROME** (M84) 1 SW UTC-5(-4DT) N41°46.96' W83°31.07'

DETOIT

605 NOTAM FILE LAN

COPTER

**RWY 18-36:** 2670X80 (TURF)

**RWY 18:** Trees.

**RWY 36:** Thld dsplcd 760. P-line.

**AIRPORT REMARKS:** Unattended. -5' ditch N of Rwy 18; 55' left and right of centerline. Rwy 36, +34' power line 50' distance, marked with orange balls. Rwy 18 and Rwy 36 thlds and Rwy 36 dsplcd thld marked with 3' cones.

**COMMUNICATIONS:** CTAF 122.9

**ESCANABA** N45°43.36' W87°05.38' NOTAM FILE ESC.

GREEN BAY

(L) VORW/DME 110.8 ESC Chan 45 at Delta Co. 594/00E. HIWAS.

L-31B

RCO 122.3 (GREEN BAY RADIO)

## ESCANABA

**DELTA CO** (ESC) 2 SW UTC-5(-4DT) N45°43.36' W87°05.62'

GREEN BAY

609 B S2 FUEL 100LL, JET A Class I, ARFF Index A NOTAM FILE ESC

H-2K, L-31B

**RWY 09-27:** H6498X150 (ASPH-PFC) S-80, D-120, 2S-152, 2D-210 HIRL

IAP

**RWY 09:** MALSR. Trees.

**RWY 27:** REIL. VASI(V4R)—GA 3.0° TCH 53'. Trees.

**RWY 18-36:** H5015X100 (ASPH-PFC) S-40, D-60 MIRL

0.3% up N

**RWY 18:** PAPI(P4L)—GA 3.0° TCH 42'. Trees.

**RWY 36:** REIL. PAPI(P4L)—GA 3.0° TCH 27'. Trees.

### RUNWAY DECLARED DISTANCE INFORMATION

**RWY 09:** TORA-6498 TODA-6498 ASDA-6498 LDA-6498

**RWY 17:** TORA-5015 TODA-5015 ASDA-5015 LDA-5015

**RWY 27:** TORA-6498 TODA-6498 ASDA-6498 LDA-6498

**RWY 36:** TORA-5015 TODA-5015 ASDA-5015 LDA-5015

**AIRPORT REMARKS:** Attended 1100-0400Z+. PPR other times call

906-420-1591. Waterfowl and birds on and in/ovf arpt. Deer on and in/ovf arpt. ACTIVATE HIRL Rwy 09-27; MIRL Rwy 18-36; PAPI Rws 18 and 36; REIL Rwy 36 and MALSR Rwy 09—CTAF. Fee for multi engine acft.

**WEATHER DATA SOURCES:** AWOS-3 121.425 (906) 786-9001.

HIWAS 110.8 ESC.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

ESCANABA RCO 122.3 (GREEN BAY RADIO)

® MINNEAPOLIS CENTER APP/DEP CON 127.65

**RADIO AIDS TO NAVIGATION:** NOTAM FILE ESC.

ESCANABA (L) VORW/DME 110.8 ESC Chan 45 N45°43.36' W87°05.38' at fld. 594/00E. HIWAS.

PIKLE NDB (LOM) 344 ES N45°43.36' W87°13.49' 087° 5.5 NM to fld.

ILS 109.3 I-ESC Rwy 09. Class IE. LOM PIKLE NDB.



LOC I-ESC	APP CRS	Rwy Idg	<b>6498</b>
<b><u>109.3</u></b>	<b>094°</b>	TDZE	<b>609</b>
		Apt Elev	<b>609</b>

ILS or LOC RWY 9  
ESCANABA / DELTA COUNTY (ESC)



**MISSED APPROACH:** Climb to 2100 then climbing right turn to 2500 direct ESC VOR/DME and hold, continue climb-in-hold to 2500.

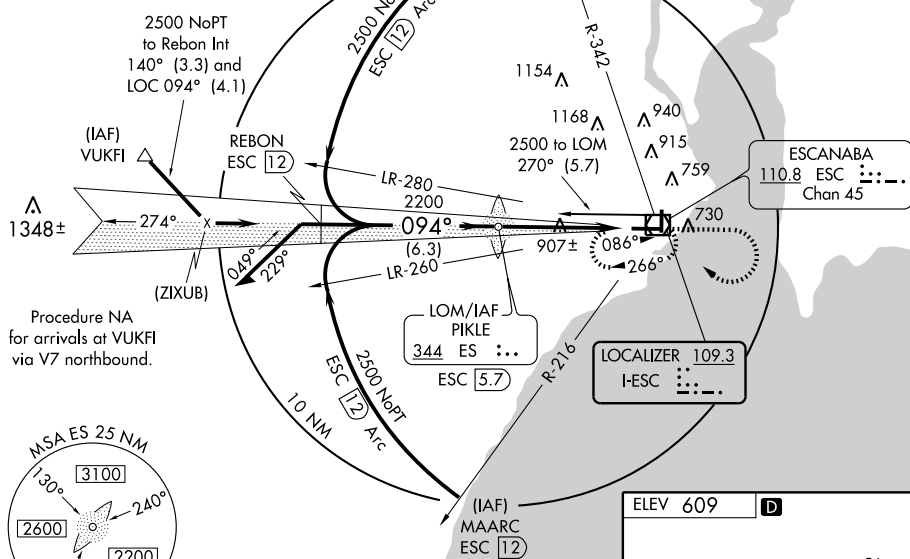
AWOS-3  
**121,425**

MINNEAPOLIS CENTER  
127.65

UNICOM  
122.8 (CTAF) **L**

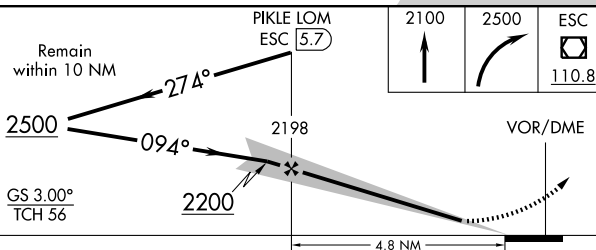
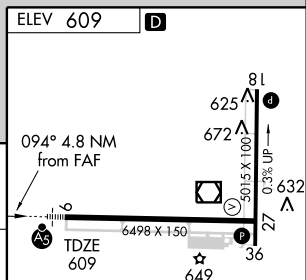
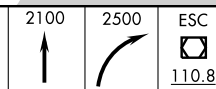
## ADF or DME REQUIRED

**CAUTION:** Magnetic disturbances of as much as  $14^\circ$  exist at ground level at Escanaba.



EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1. 23 SEP 2010 to 21 OCT 2010



CATEGORY	A	B	C	D
S-ILS 9	809-½ 200 (200-½)			
S-LOC 9	1160-½ 551 (600-½)	1160-1 551 (600-1)	1160-1¼ 551 (600-1¼)	
CIRCLING	1160-1 551 (600-1)	1240-1¾ 631 (700-1¾)	1280-2¼ 671 (700-2¼)	

HIRL Rwy 9-27 **L**  
MIRL Rwy 18-36 **L**  
REIL Rwy 36 **L**

FAF to MAP 4.8 NM					
Knots	60	90	120	150	180
Min:Sec	4:48	3:12	2:24	1:55	1:36

ESCANABA, MICHIGAN  
Amdt 2 09295

ESCANABA / DELTA COUNTY (ESC)

45°43'N - 87°06'W

ILS or LOC RWY 9



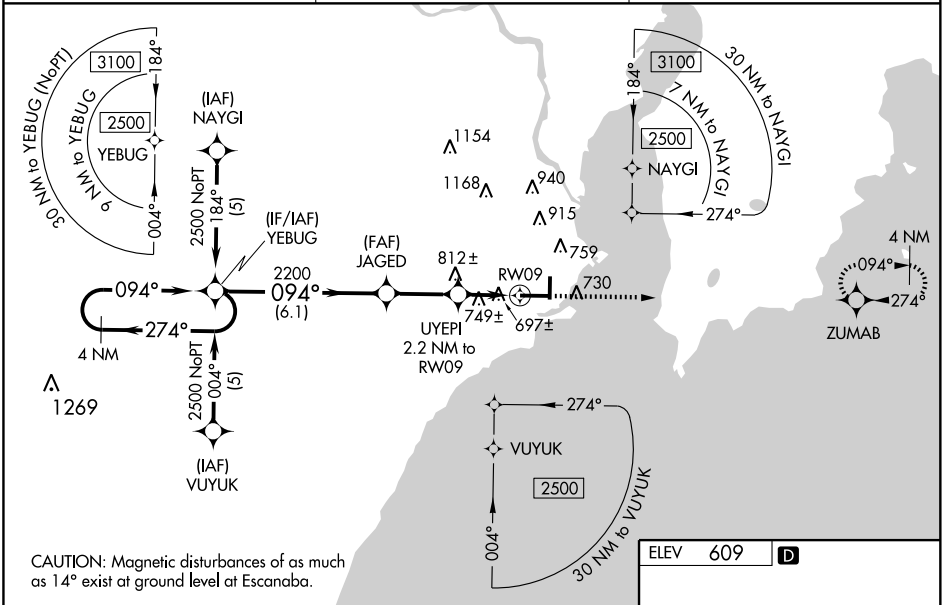
WAAS CH <b>70511</b> <b>W09A</b>	APP CRS <b>094°</b>	Rwy Idg TDZE Apt Elev	<b>6498</b> <b>609</b> <b>609</b>
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# **RNAV (GPS) RWY 9** ESCANABA / DELTA COUNTY (ESC)

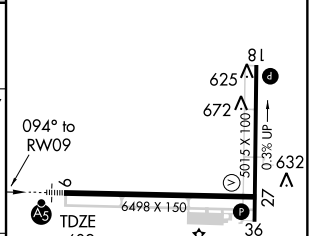
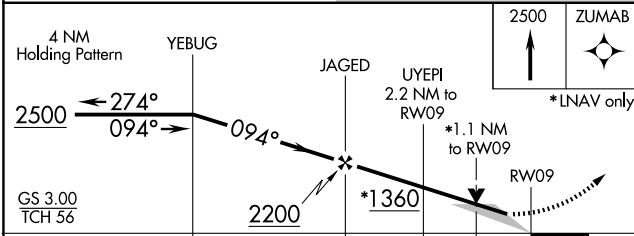
**⚠** For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Sawyer Intl altimeter setting and increase LPV DA to 987, LNAV/VNAV DA to 1145, increase all MDA 180 feet, increase LPV visibility all Cats ¼ mile, LNAV/VNAV visibility all Cats ½ mile, increase LNAV Cat C visibility ½ mile, LNAV Cat D visibility ¼ mile, increase Circling Cat C visibility ¾ mile, and Circling Cat D visibility ½ mile. For inoperative MALSR, increase LNAV Cat D visibility to 1¼. For inoperative MALSR, when using Sawyer Intl altimeter setting, increase LPV all Cats visibility to 1¼. VDP NA when using Sawyer Intl altimeter setting. Baro-VNAV NA when using Sawyer Intl altimeter setting.

**MALSR**  
**AS**  
**MISSED APPROACH:**  
Climb to 2500 direct ZUMAB and hold.

AWOS-3 <b>121.425</b>	MINNEAPOLIS CENTER <b>127.65</b>	UNICOM <b>122.8 (CTAF) 0</b>
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CAUTION: Magnetic disturbances of as much as 14° exist at ground level at Escanaba.



CATEGORY	A	B	C	D
LPV DA		809-½	200 (200-½)	
LNAV/VNAV DA		967-¾	358 (400-¾)	
LNAV MDA	1000-½	391 (400-½)		1000-1 391 (400-1)
CIRCLING	1060-1	451 (500-1)	1240-1¾ 631 (700-1¾)	1280-2¼ 671 (700-1¼)

HIRL Rwy 9-27 **0**  
MIRL Rwy 18-36 **0**  
REIL Rwy 36 **0**

APP CRS	Rwy Idg	6498
274°	TDZE	596
	Apt Elev	609

## RNAV (GPS) RWY 27

ESCANABA / DELTA COUNTY (ESC)

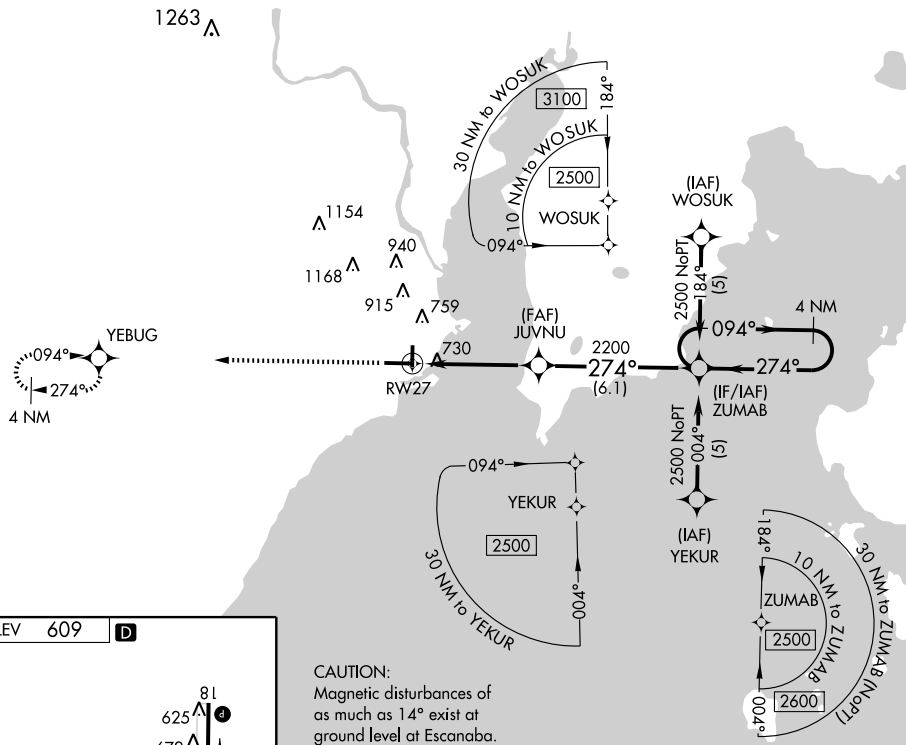
- T** DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Sawyer Intl altimeter setting and increase all MDA 180 feet, increase LNAV Cat C and D visibility  $\frac{1}{2}$  mile, increase Circling Cat C visibility  $\frac{3}{4}$  mile, and Circling Cat D visibility  $\frac{1}{2}$  mile.

**MISSED APPROACH:** Climb to 2500 direct YEBUG and hold.

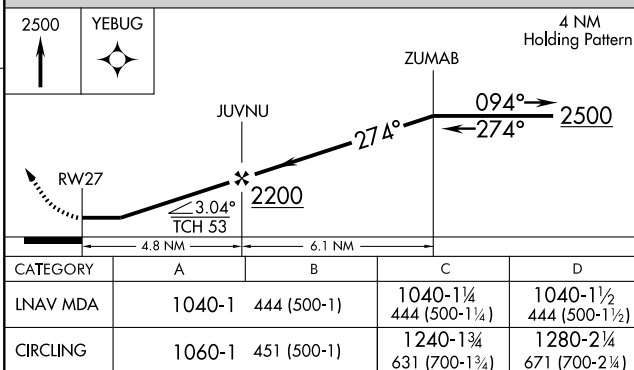
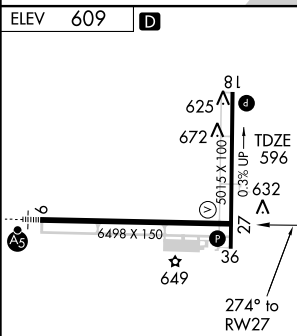
AWOS-3  
121.425

MINNEAPOLIS CENTER  
127.65

UNICOM  
122.8 (CTAF) **L**



**CAUTION:**  
Magnetic disturbances of  
as much as  $14^\circ$  exist at  
ground level at Escanaba.



ESCANABA, MICHIGAN  
Orig 09295

45°43'N - 87°06'W

ESCANABA / DELTA COUNTY (ESC)

## RNAV (GPS) RWY 27

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1. 23 SEP 2010 to 21 OCT 2010

VOR/DME ESC <b>110.8</b> Chan <b>45</b>	APP CRS <b>086°</b>	Rwy Idg TDZE Apt Elev <b>6498</b> <b>609</b> <b>609</b>
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# VOR RWY 9

ESCANABA / DELTA COUNTY (ESC)

**⚠** When local altimeter setting not received, use Sawyer Intl altimeter setting and increase all MDA 180 feet, increase S-9 Cat B visibility  $\frac{1}{4}$  mile, Cats C and D visibility  $\frac{3}{4}$  mile, Circling Cat B visibility  $\frac{1}{4}$  mile, Cat C visibility  $\frac{3}{4}$  mile, Cat D visibility  $\frac{1}{2}$  mile, increase DEPXE fix minimums S-9 Cats C and D visibility  $\frac{1}{2}$  mile, Circling Cat C visibility  $\frac{3}{4}$  mile, Cat D visibility  $\frac{1}{2}$  mile. VDP NA when using Sawyer Intl altimeter setting.

MALSRL

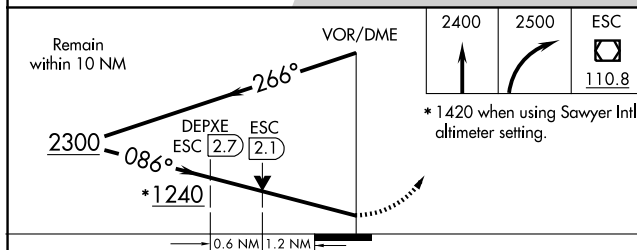
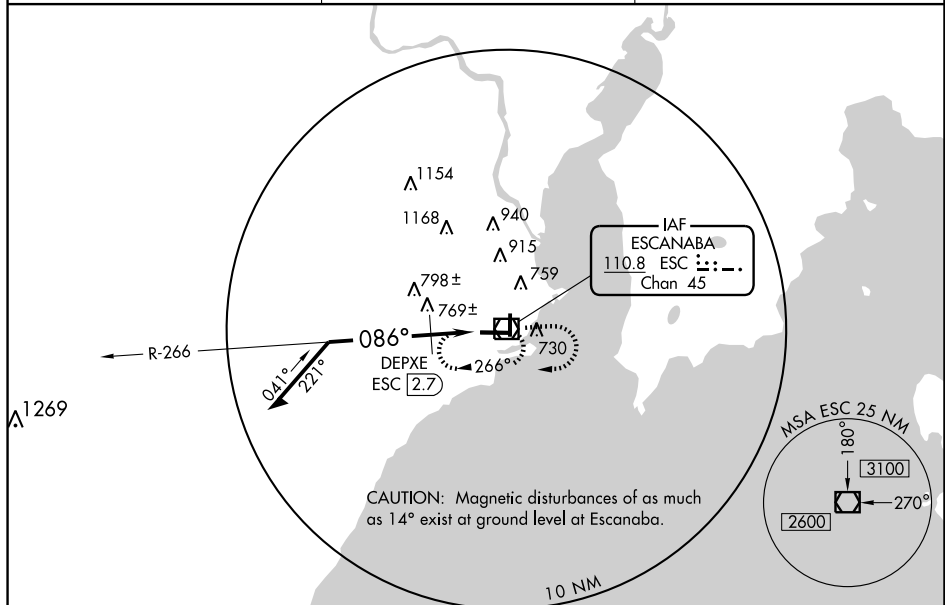


**MISSED APPROACH:**  
Climb to 2400 then climbing right turn to 2500 direct ESC VOR/DME and hold.

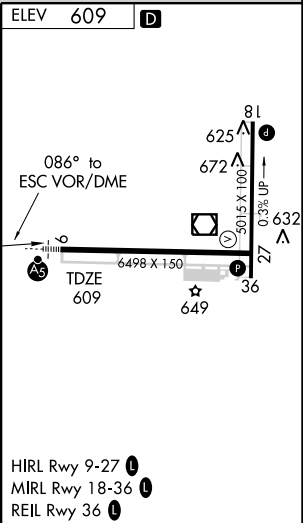
AWOS-3  
**121.425**

MINNEAPOLIS CENTER  
**127.65**

UNICOM  
**122.8 (CTAF)**



CATEGORY	A	B	C	D
S-9	1240- $\frac{1}{2}$ 631 (700- $\frac{1}{2}$ )		1240-1 $\frac{1}{4}$ 631 (700-1 $\frac{1}{4}$ )	1240-1 $\frac{1}{2}$ 631 (700-1 $\frac{1}{2}$ )
CIRCLING	1240-1 631 (700-1)		1240-1 $\frac{3}{4}$ 631 (700-1 $\frac{3}{4}$ )	1280-2 $\frac{1}{4}$ 671 (700-2 $\frac{1}{4}$ )
DEPXE FIX MINIMUMS				
S-9	1040 - $\frac{1}{2}$ 431 (500- $\frac{1}{2}$ )		1040- $\frac{3}{4}$ 431 (500- $\frac{3}{4}$ )	1040-1 431 (500-1)
CIRCLING	1060 -1 451 (500-1)		1240-1 $\frac{3}{4}$ 631 (700-1 $\frac{3}{4}$ )	1280-2 $\frac{1}{4}$ 671 (700-2 $\frac{1}{4}$ )





VOR/DME ESC <b>110.8</b> Chan <b>45</b>	APP CRS <b>282°</b>	Rwy Ldg TDZE Apt Elev <b>609</b>	<b>6498</b> <b>596</b> <b>609</b>
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# VOR RWY 27

ESCANABA / DELTA COUNTY (ESC)

**V** Visibility reduction by helicopters NA.  
**A** When local altimeter setting not received, use Sawyer Intl altimeter setting and increase all MDA 180 feet, increase S-9 Cat C and D visibility ½ mile, Circling Cat C visibility ¾ mile, Cat D visibility ½ mile.

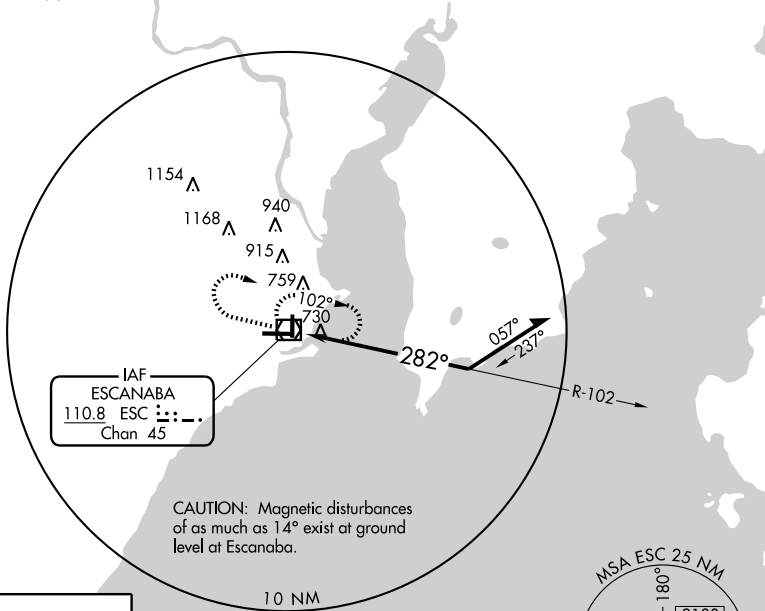
**MISSED APPROACH:** Climb to 2400 then climbing right turn to 2500 direct ESC VOR/DME and hold.

AWOS-3  
**121.425**

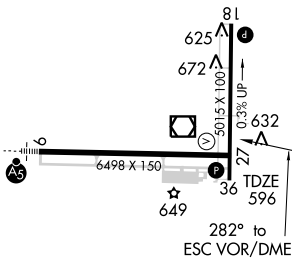
MINNEAPOLIS CENTER  
**127.65**

UNICOM  
**122.8 (CTAF) 0**

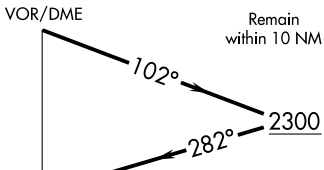
1263 **A**



ELEV 609 **D**



2400	2500	ESC
↑	↗	<b>110.8</b>



Remain within 10 NM

CATEGORY	A	B	C	D
S-27	1080 -1	484 (500-1)	1080 -1¼ 484 (500-1¼)	1080 -1½ 484 (500-1½)
CIRCLING	1080 -1	471 (500-1)	1240-1¾ 631 (700-1¾)	1280-2¼ 671 (700-2¼)

HIRL Rwy 9-27 **0**  
 MIRL Rwy 18-36 **0**  
 REIL Rwy 36 **0**

VOR/DME ESC <b>110.8</b> Chan <b>45</b>	APP CRS <b>351°</b>	Rwy Idg TDZE Apt Elev	<b>5015</b> <b>601</b> <b>609</b>
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**VOR RWY 36**

ESCANABA / DELTA COUNTY (ESC)



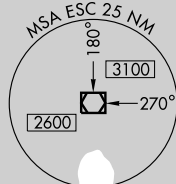
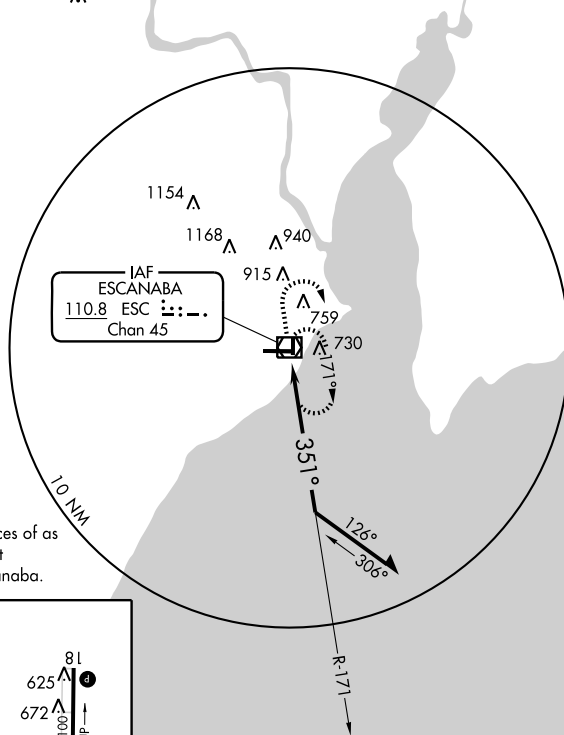
MISSED APPROACH: Climb to 2400, then right turn direct ESC VOR/DME and hold.

AWOS-3  
**121.425**

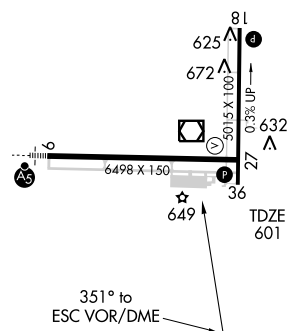
MINNEAPOLIS CENTER  
**127.65**

UNICOM  
**122.8 (CTAF) 0**

1263



ELEV 609



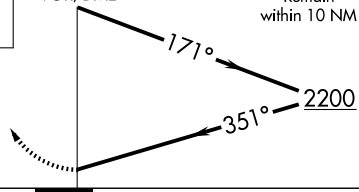
2400  
↑



ESC  
 110.8

VOR/DME

Remain within 10 NM



HIRL Rwy 9-27   
MRL Rwy 18-36   
REIL Rwy 36

CATEGORY	A	B	C	D
S-36	1080-1 479 (500-1)		1080-1 479 (500-1 1/4)	1080-1 479 (500-1 1/2)
CIRCLING	1080-1 471 (500-1)	1100-1 491 (500-1)	1240-1 631 (700-1 3/4)	1280-2 671 (700-2 1/4)

## AIRPORT DIAGRAM

AL-618 (FAA)

FLINT / BISHOP INTL (FNT)  
FLINT, MICHIGAN

ATIS  
133.15  
FLINT TOWER ★  
126.3 257.9  
GND CON  
121.9  
CLNC DEL  
121.75

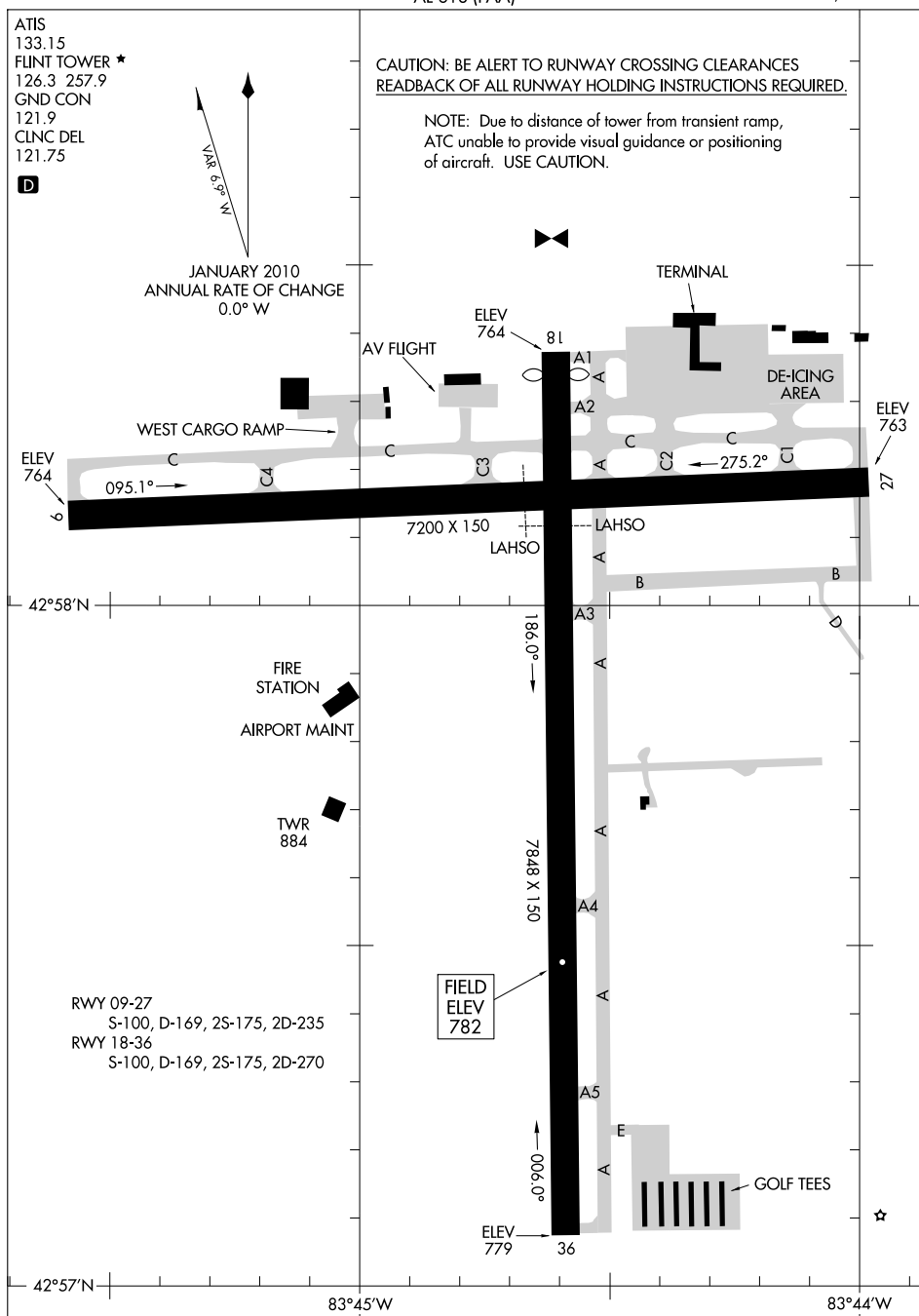
D

JANUARY 2010  
ANNUAL RATE OF CHANGE  
0.0° W

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES  
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS REQUIRED.

NOTE: Due to distance of tower from transient ramp,  
ATC unable to provide visual guidance or positioning  
of aircraft. USE CAUTION.

EC-1, 23 SEP 2010 to 21 OCT 2010



EC-1, 23 SEP 2010 to 21 OCT 2010

## AIRPORT DIAGRAM

FLINT, MICHIGAN  
FLINT / BISHOP INTL (FNT)

## FLINT

**BISHOP INTL** (FNT) 3 SW UTC-5(-4DT) N42°57.93' W83°44.62'

782 B S4 FUEL 100LL, JET A TPA—See Remarks AOE Class I, ARFF Index B  
NOTAM FILE FNT

**RWY 18-36:** H7848X150 (ASPH-PFC) S-100, D-169, 2S-175, 2D-270 HIRL

**RWY 18:** VASI(V4L)—GA 3.0° TCH 41'. Thld dsplcd 200'. Tree.

**RWY 36:** VASI(V4L)—GA 3.0° TCH 54'. Tree.

**RWY 09-27:** H7200X150 (ASPH-PFC) S-100, D-169, 2S-175, 2D-235 HIRL

**RWY 09:** MALSR. Trees. **RWY 27:** MALSR. VASI(V4L)—GA 3.0° TCH 56'. Trees.

**LAND AND HOLD SHORT OPERATIONS**

LANDING	HOLD SHORT POINT	DIST AVBL
<b>RWY 09</b>	18-36	4100
<b>RWY 36</b>	09-27	6300

**RUNWAY DECLARED DISTANCE INFORMATION**

**RWY 18:** TORA-7848 TODA-7848 ASDA-7848 LDA-7648

**RWY 36:** TORA-7848 TODA-7848 ASDA-7648 LDA-7648

**AIRPORT REMARKS:** Attended continuously. Birds and deer on and in/ovf arpt. TPA-1582(800) single-engine, 1982(1200) multi-engine acft. ACTIVATE MALSR Rwy 09-27—CTAF. Rwy lgts preset—no ints change avbl when twr clsd.

**WEATHER DATA SOURCES:** ASOS (810) 232-4477.

**COMMUNICATIONS:** CTAF 126.3 ATIS 133.15 UNICOM 122.95

**FLINT RCO 122.3** (LANSING RADIO)

Ⓡ **FLINT APP CON 128.55** (N/W of active rwy) 118.8 (E/S of active rwy) 133.8 (1045-0430Z‡)

**CLEVELAND CENTER APP/DEP CON 126.75** (0430-1045Z‡)

**FLINT TOWER 126.3** (1045-0430Z‡) **GND CON 121.9** **CLNC DEL 121.75**

**AIRSPACE: CLASS C** svc 1045-0430Z‡ ctc **APP CON 128.55** (N/W of active rwy) 118.8 (E/S of active rwy) other times CLASS E.

**RADIO AIDS TO NAVIGATION:** NOTAM FILE FNT.

**FLINT (H) VORTACW 116.9** FNT Chan 116 N42°58.01' W83°44.82' at fld. 772/6W.

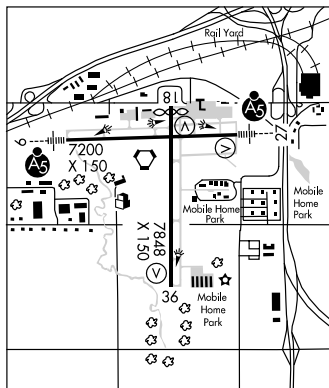
**PETLI NDB (LOM) 269** FN N42°58.09' W83°53.41' 097° 6.5 NM to fld.

**ILS 109.9** I-FNT Rwy 09. LOM PETLI NDB.

**ILS 109.9** I-TUN Rwy 27. Class IB.

**ASR (1045-0430Z‡)**

**COMM/NAV/WEATHER REMARKS:** Emerg frequencies not avbl at twr. ILS Rwy 09, 27 and NDB unmonitored when twr clsd.



## FLUSHING

**DALTON** (3DA) 2 E UTC-5(-4DT) N43°03.15' W83°48.29'

733 B FUEL: 100LL NOTAM FILE LAN

**RWY 18-36:** H2510X50 (ASPH) LIRL

**RWY 18:** Thld dsplcd 771'. Tree. **RWY 36:** Thld dsplcd 771'. Trees.

**RWY 09-27:** 1633X130 (TURF)

**RWY 09:** Tree. **RWY 27:** Thld dsplcd 293'. Road.

**AIRPORT REMARKS:** Attended irregularly. Fuel available by credit card. Rwy 09-27 CLOSED Oct through Mar. Rwy 09-27 CLOSED to transient acft permanently. Rwy 09-27 marked with 3' yellow cones. ACTIVATE LIRL Rwy 18-36—CTAF.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

**FLYING-A-RANCH** (See FRUITPORT)

**FLYING M RANCH** (See LINCOLN)

**FORD** (See IRON MOUNTAIN/KINGSFORD)

DETROIT

H-106, 11A, L-28J

IAP, AD

DETROIT

LOC I-FNT	APP CRS	Rwy Idg	<b>7200</b>
<b><u>109.9</u></b>	<b>094°</b>	TDZE	<b>771</b>
		Apt Elev	<b>782</b>

# ILS or LOC RWY 9

## FLINT / BISHOP INTL (FNT)

**T**  
**A**  
ASR

RVR 1800 authorized with the use of FD  
or AP or HUD to DA.

MALSR

**MISSED APPROACH:** Climb to 1500, then climbing right turn to 3000 via FNT R-097 to KATTY INT/FNT 10.3 DME and hold.

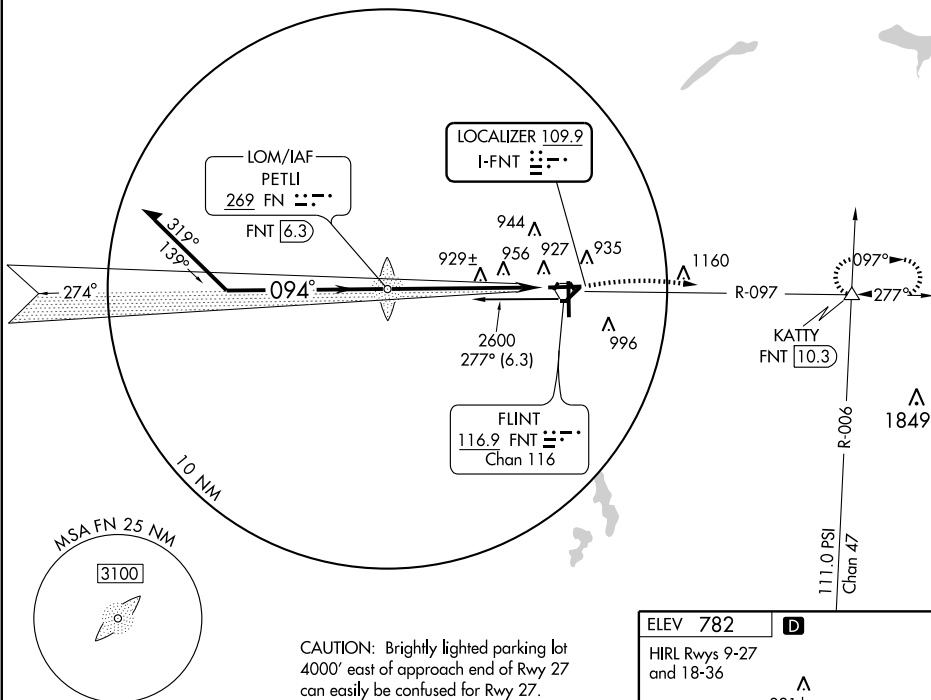
ATIS  
**133.15**

FLINT APP CON ★  
118.8 257.9

FLINT TOWER ★  
126.3 (CTAF) **L** 257.9

GND CON  
**121.9**

CLNC DEB  
121.75

UNICOM  
122.95

**CAUTION:** Brightly lighted parking lot 4000' east of approach end of Rwy 27 can easily be confused for Rwy 27.

Remain within 10 NM

PETLI LOM  
FNT [6.3]

2600

274°

094°

2560

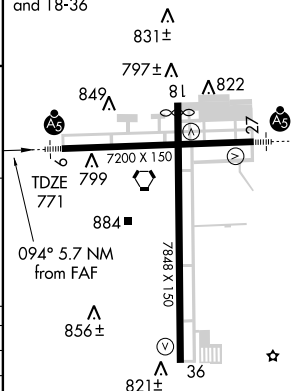
2600

GS 2.80°  
TCH 59

1500 ↑	3000 ↘ FNT R-097	KATTY △
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CATEGORY	A	B	C	D
S-ILS 9	971/24		200 (200-½)	
S-LOC 9	1180/24 409 (400-½)		1180/40 409 (400-¾)	
CIRCLING	1300 - 1	518 (600-1)	1300 - 1½ 518 (600-1½)	1340-2 558 (600-2)

ELEV 782

HIRL Rwy 9-27  
and 18-36

FAF to MAP 5.7 NM					
Knots	60	90	120	150	180
Min:Sec	5:42	3:48	2:51	2:17	1:54

FLINT, MICHIGAN  
Amdt 22A 06MAY10

42°58'N - 83°45'W

FLINT / BISHOP INTL (FNT)  
ILS or LOC RWY 9

EC-1. 23 SEP 2010 to 21 OCT 2010

LOC I-TUN <b>109.9</b>	APP CRS <b>274°</b>	Rwy Idg <b>7200</b> TDZE <b>770</b> Apt Elev <b>782</b>
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# ILS or LOC RWY 27

FLINT/BISHOP INTL (FNT)

**V** When local altimeter setting not received, use Owosso altimeter setting and increase all DA 47 feet and all MDA 60 feet, and S-LOC 27 visibilities Cat C/D ¼ mile.

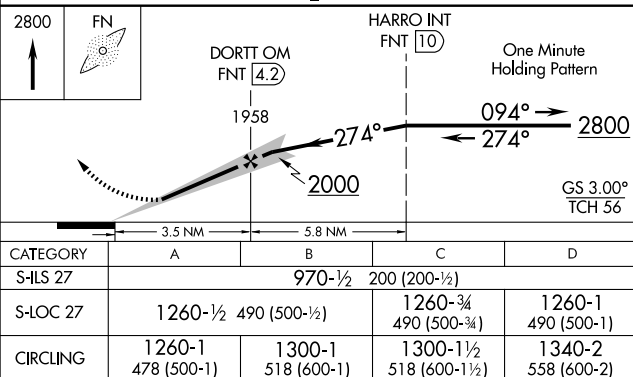
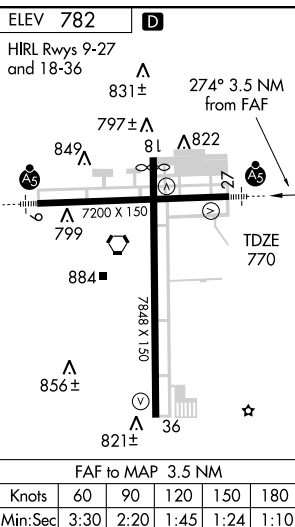
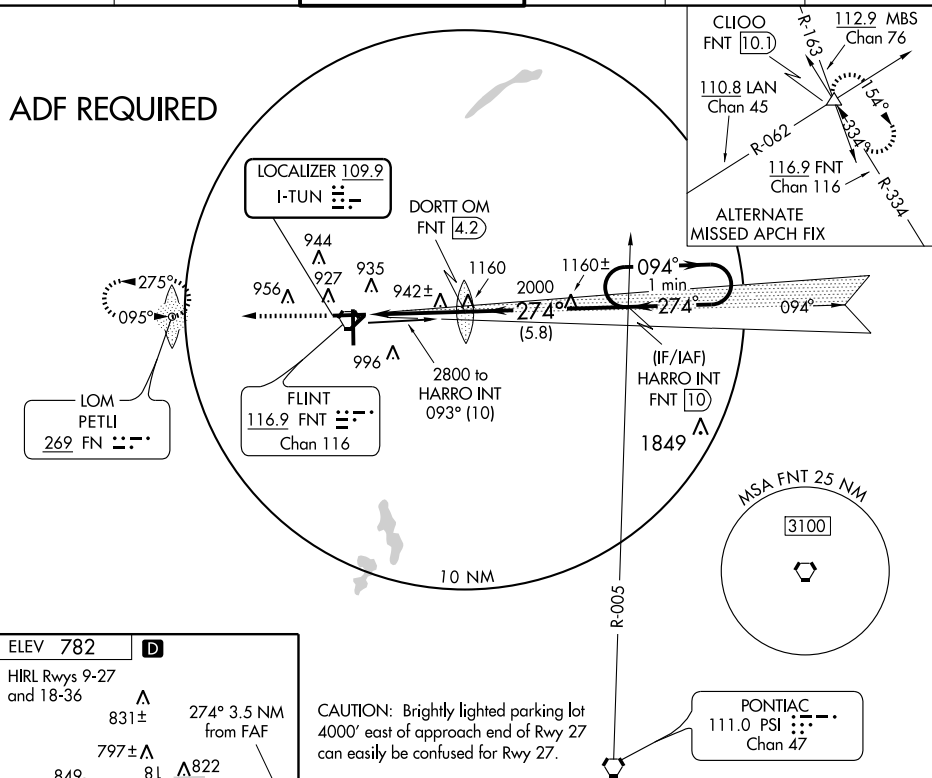
**A** ASR



**MISSED APPROACH:** Climb to 2800 direct PETLI LOM and hold or as directed by ATC.

ATIS <b>133.15</b>	FLINT APP CON ★ <b>118.8 257.9</b>	FLINT TOWER ★ <b>126.3 (CTAF) 257.9</b>	GND CON <b>121.9</b>	CLNC DEL <b>121.75</b>	UNICOM <b>122.95</b>
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## ADF REQUIRED



## LAND AND HOLD SHORT OPERATIONS (LAHSO)

LAHSO is an acronym for "Land and Hold Short Operations." These operations include landing and holding short of an intersection runway, an intersecting taxiway, or other predetermined points on the runway other than a runway or taxiway. Measured distance represents the available landing distance on the landing runway, in feet.

Specific questions regarding these distances should be referred to the air traffic manager of the facility concerned. The Aeronautical Information Manual contains specific details on hold-short operations and markings.

CITY/AIRPORT	LDG RWY	HOLD-SHORT POINT	MEASURED DISTANCE
BATTLE CREEK, MI W.K. KELLOGG (BTL)	05	13-31	7,000 feet
DETROIT, MI COLEMAN A. YOUNG MUNI (DET)	15	07-25	4,900 feet
FLINT, MI BISHOP INTL (FNT)	09 36	18-36 09-27	4,100 feet 6,300 feet
JACKSON, MI JACKSON COUNTY-REYNOLDS FIELD (JXN)	24	14-32	3,406 feet
TRAVERSE CITY, MI CHERRY CAPITAL (TVC)	18 28 28	10-28 18-36 18-36	2,850 feet 5,500 feet 5,500 feet

23 SEP 2010 to 21 OCT 2010

23 SEP 2010 to 21 OCT 2010

WAAS CH <b>45714</b> <b>W09A</b>	APP CRS <b>094°</b>	Rwy ldg <b>7200</b> TDZE <b>771</b> Apt Elev <b>782</b>
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# RNAV (GPS) RWY 9

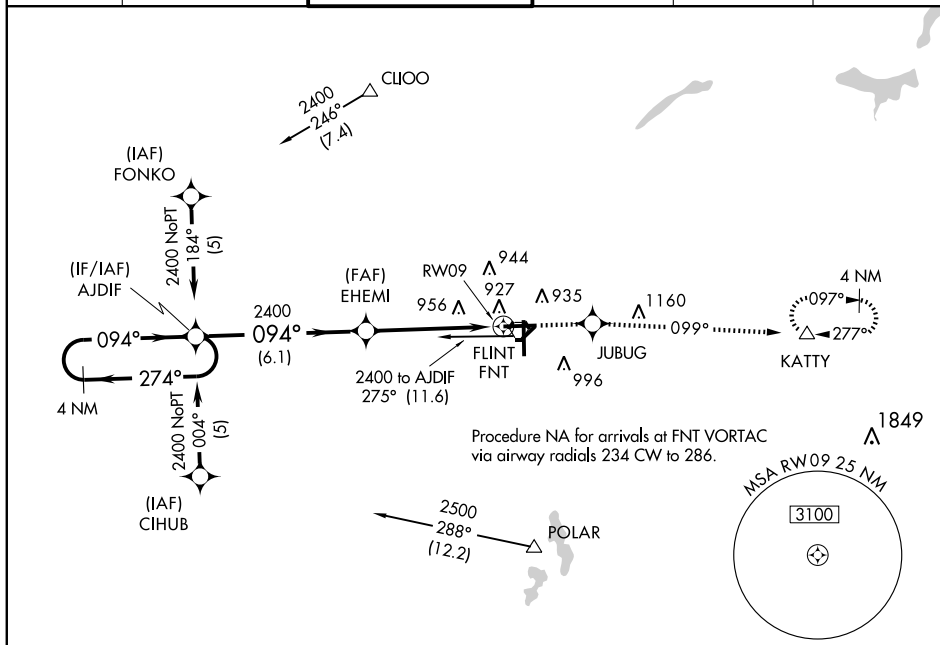
FLINT / BISHOP INTL (FNT)

**ASR** For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F).  
DME/DME RNP -0.3 NA.

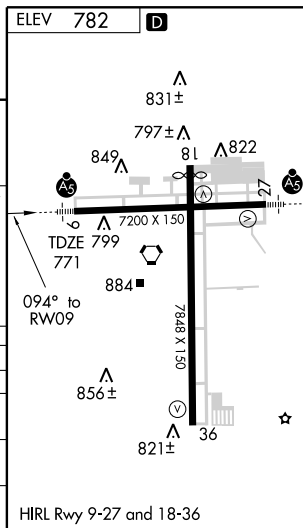


**MISSED APPROACH:** Climb to 3000 direct JUBUG and via track 099° to KATTY and hold.

ATIS <b>133.15</b>	FLINT APP CON ★ <b>118.8 257.9</b>	FLINT TOWER ★ <b>126.3 (CTAF) 0 257.9</b>	GND CON <b>121.9</b>	CLNC DEL <b>121.75</b>	UNICOM <b>122.95</b>
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4 NM Holding Pattern 2400 ← 274° 094° → GS 3.00° TCH 50					3000	JUBUG	TRK 099°	KATTY
2400 6.1 NM 3.5 NM 1.4 NM					*1.4 NM to RW09 *LNAV only			
CATEGORY	A	B	C	D				
LPV DA	971/24				200 (200-1/2)			
LNAV/VNAV DA	1227/50				456 (500-1)			
LNAV MDA	1260/24	489 (500-1/2)	1260/40	1260/50				
			489 (500-3/4)	489 (500-1)				
CIRCLING	1300-1	518 (600-1)	1300-1 1/2	1340-2				
			518 (600-1 1/2)	558 (600-2)				





WAAS CH <b>99514</b> <b>W18A</b>	APP CRS <b>185°</b>	Rwy ldg TDZE <b>776</b> Apt Elev <b>782</b>
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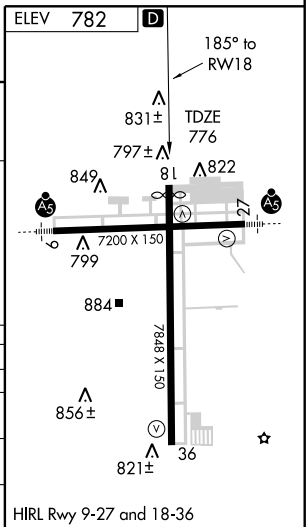
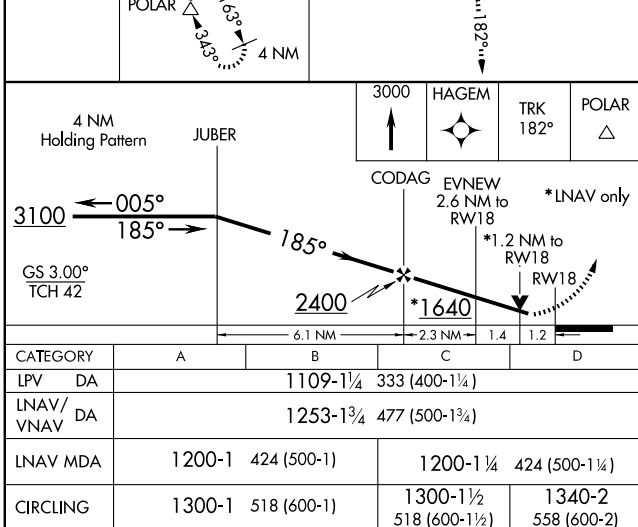
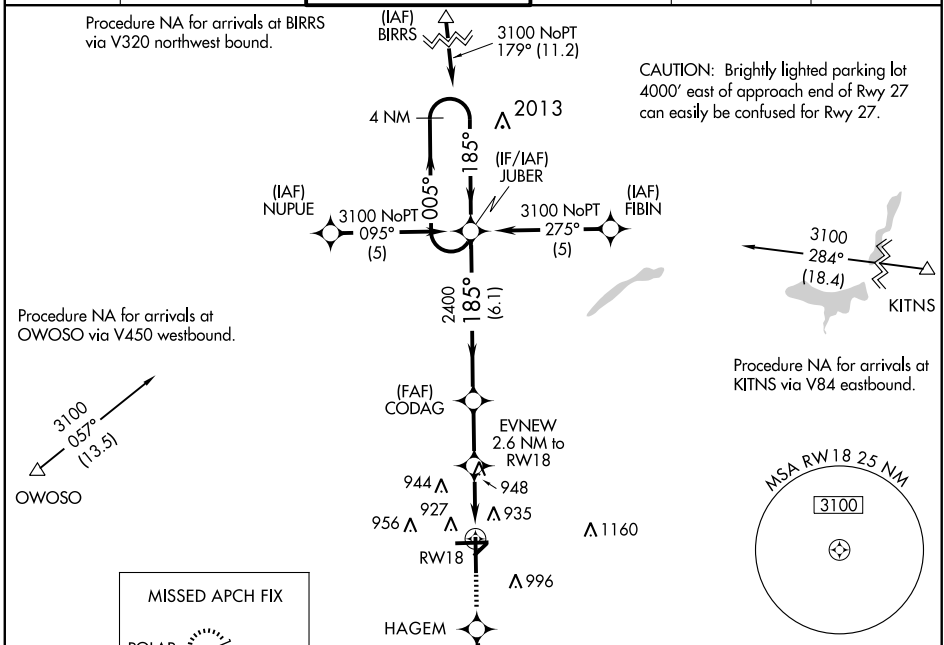
# RNAV (GPS) RWY 18

FLINT / BISHOP INTL (FNT)

**ASR** For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.

**MISSED APPROACH:** Climb to 3000 direct HAGEM and via track 182° to POLAR and hold.

ATIS <b>133.15</b>	FLINT APP CON ★ <b>118.8 257.9</b>	FLINT TOWER ★ <b>126.3 (CTAF) 257.9</b>	GND CON <b>121.9</b>	CLNC DEL <b>121.75</b>	UNICOM <b>122.95</b>
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WAAS CH <b>72810</b> <b>W27A</b>	APP CRS <b>274°</b>	Rwy Idg TDZE <b>770</b> Apt Elev <b>782</b>
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## RNAV (GPS) RWY 27

FLINT / BISHOP INTL (FNT)



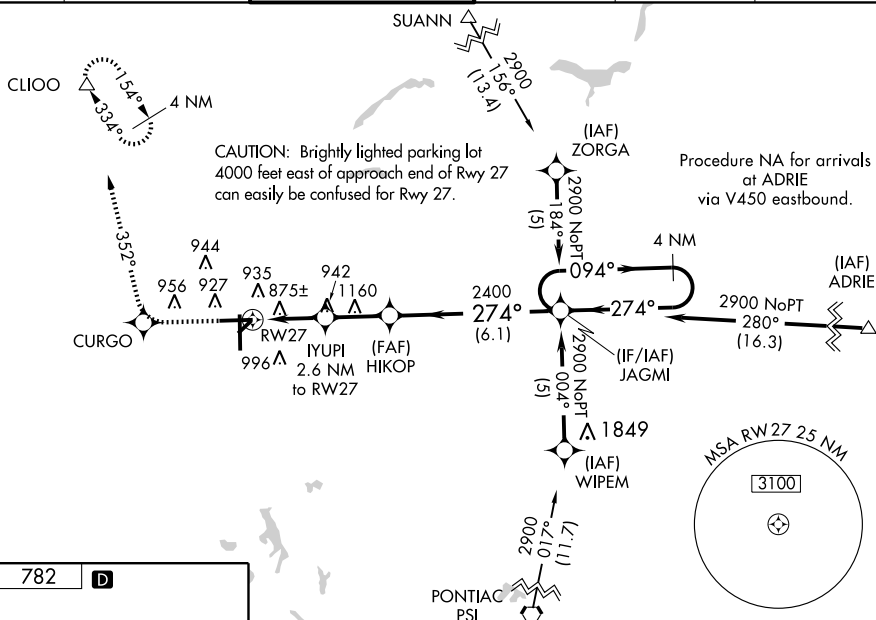
When local altimeter setting not received, use Owosso altimeter setting and increase all DA 47 feet, and all MDA 60 feet; and LNAV visibilities Cat C/D ¼ mile. VDP NA when using Owosso altimeter setting. Baro-VNAV NA when using Owosso altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). For inoperative MALS, increase LPV all Cats visibility to 1¼. DME/DME RNP-0.3 NA.

MALS



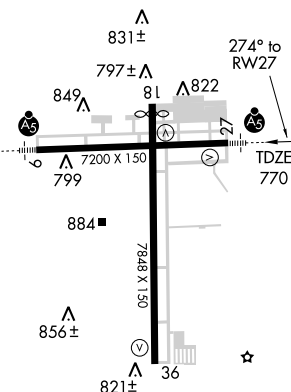
MISSED APPROACH:  
Climb to 3000 direct CURGO and via 352° track to CLIOO and hold.

ATIS <b>133.15</b>	FLINT APP CON ★ <b>118.8 257.9</b>	FLINT TOWER ★ <b>126.3 (CTAF) 257.9</b>	GND CON <b>121.9</b>	CLNC DEL <b>121.75</b>	UNICOM <b>122.95</b>
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ELEV 782

D



HIRL Rwy 9-27 and 18-36

3000	CURGO	352° track	CLIOO	4 NM	JAGMI Holding Pattern
* LNAV only					
CATEGORY	A	B	C	D	
LPV DA	1098 - ¾		328 (400-¾)		
LNAV/VNAV DA	1240 - 1¼		470 (500-1¼)		
LNAV MDA	1260 - ½	490 (500-½)	1260 - ¾ 490 (500-¾)	1260 - 1 490 (500-1)	
CIRCLING	1260 - 1 478 (500-1)	1300 - 1 518 (600-1)	1300 - 1½ 518 (600-1½)	1340 - 2 558 (600-2)	

FLINT, MICHIGAN

Amdt 1 09351

42°58'N - 83°45'W

FLINT / BISHOP INTL (FNT)

RNAV (GPS) RWY 27

WAAS CH <b>65914</b> <b>W36A</b>	APP CRS <b>005°</b>	Rwy Idg TDZE Apt Elev	<b>7648</b> <b>782</b> <b>782</b>
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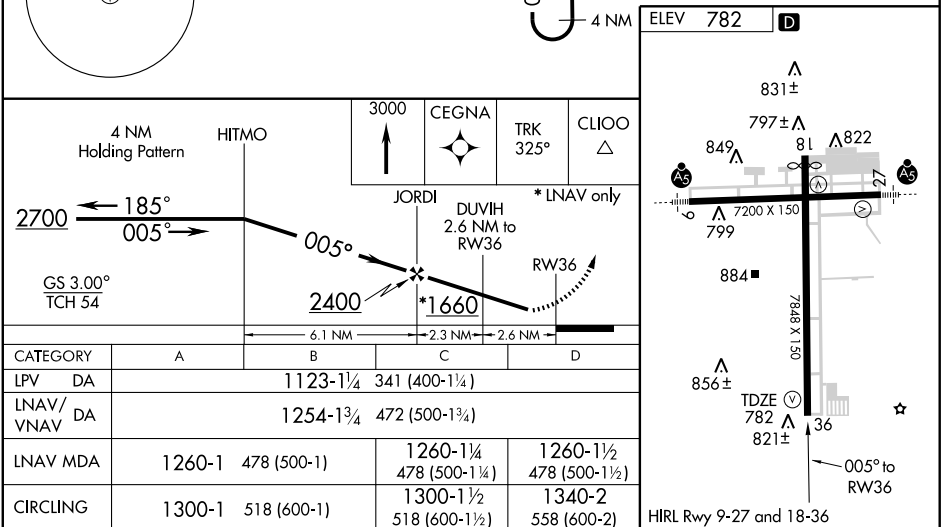
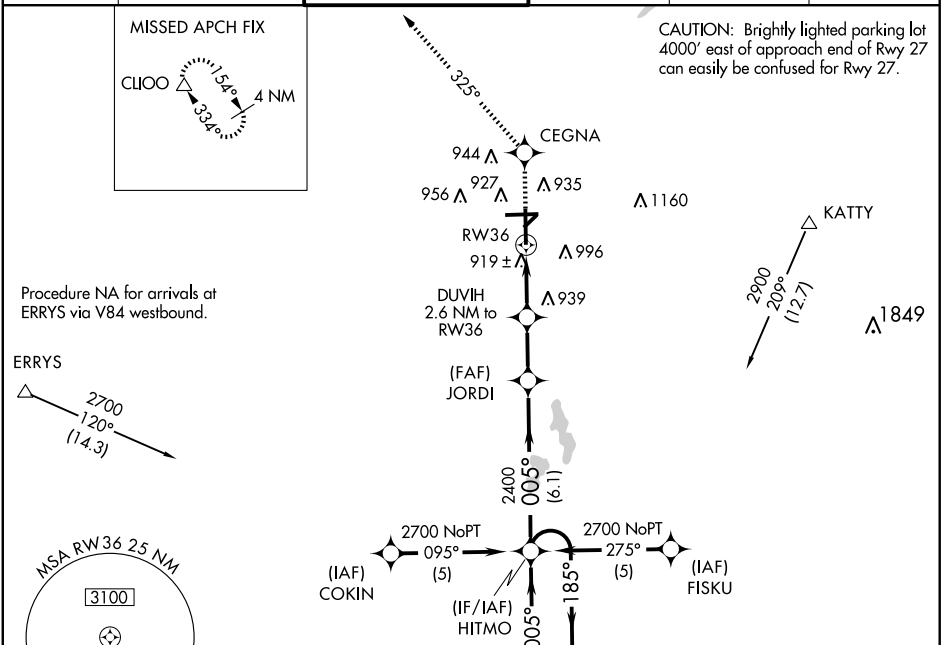
# RNAV (GPS) RWY 36

FLINT / BISHOP INTL (FNT)

**ASR** For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F).  
DME/DME RNP -0.3 NA. Visibility reduction by helicopters NA.

**MISSED APPROACH:** Climb to 3000 direct CEGNA and via track 325° to CLIOO and hold.

ATIS <b>133.15</b>	FLINT APP CON ★ <b>118.8 257.9</b>	FLINT TOWER ★ <b>126.3 (CTAF) 257.9</b>	GND CON <b>121.9</b>	CLNC DEL <b>121.75</b>	UNICOM <b>122.95</b>
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VORTAC FNT <b>116.9</b> Chan <b>116</b>	APP CRS <b>102°</b>	Rwy ldg TDZE Apt Elev	<b>7200</b> <b>771</b> <b>782</b>
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**VOR RWY 9**  
FLINT / BISHOP INTL (FNT)

ASR



MISSED APPROACH: Climb to 3000 via FNT R-097 to KATTY INT/FNT 10.3 DME and hold.

ATIS  
**133.15**

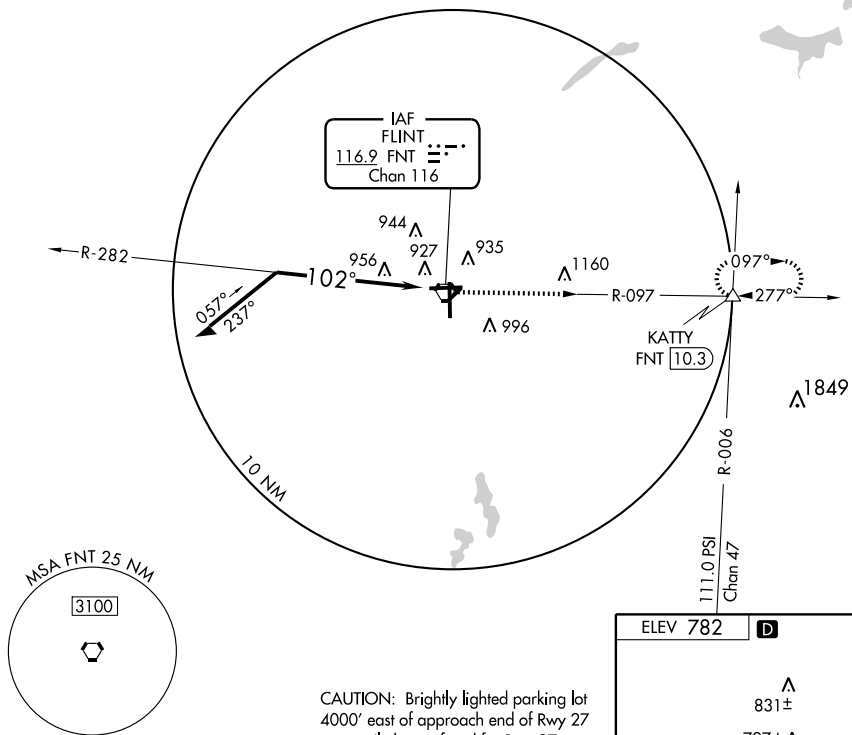
FLINT APP CON ★  
**118.8 257.9**

FLINT TOWER ★  
**126.3 (CTAF) 257.9**

GND CON  
**121.9**

CLNC DEL  
**121.75**

UNICOM  
**122.95**



Remain  
within 10 NM

VORTAC

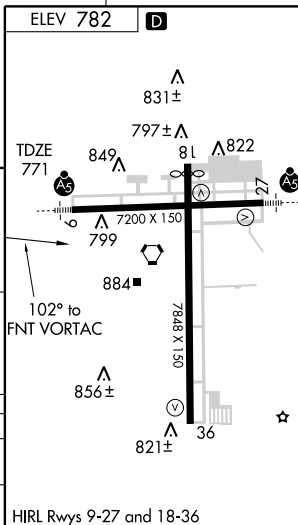
2200

282°  
102°

3000

FNT R-097  
116.9

KATTY  
△



CATEGORY	A	B	C	D
S-9	1300/24 529 (500-½)		1300/50 529 (600-1)	1300/60 529 (600-1¼)
CIRCLING	1300-1 518 (600-1)		1300-1½ 518 (600-1½)	1340-2 558 (600-2)

HIRL Rwy 9-27 and 18-36

VORTAC FNT <b>116.9</b> Chan <b>116</b>	APP CRS <b>196°</b>	Rwy Idg TDZE <b>779</b> Apt Elev <b>782</b>
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# VOR RWY 18 FLINT / BISHOP INTL (FNT)



MISSED APPROACH: Climbing left turn to 3000  
via FNT R-097 to KATY INT and hold.

ATIS  
**133.15**

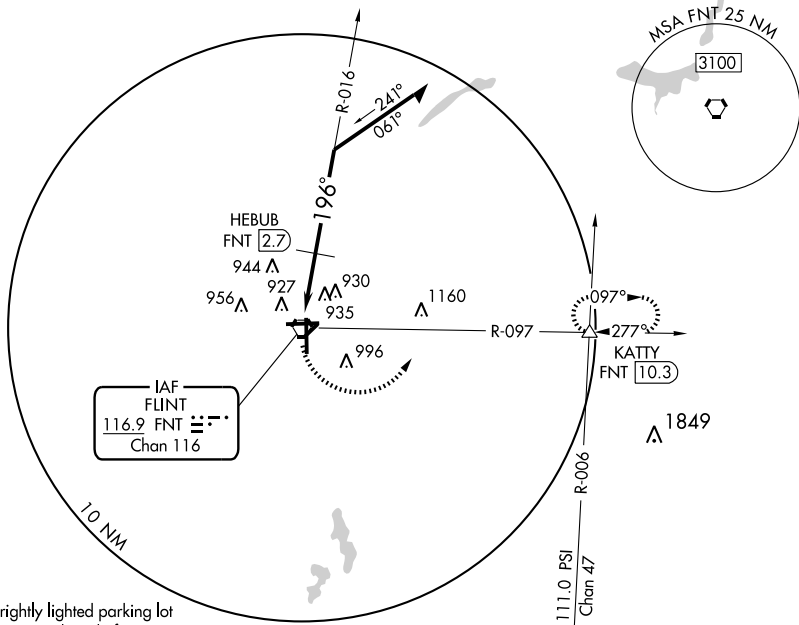
FLINT APP CON ★  
**118.8 257.9**

FLINT TOWER ★  
**126.3 (CTAF) 257.9**

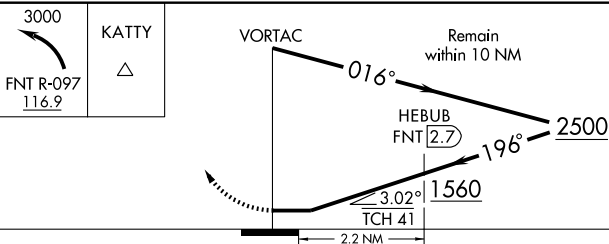
GND CON  
**121.9**

CLNC DEL  
**121.75**

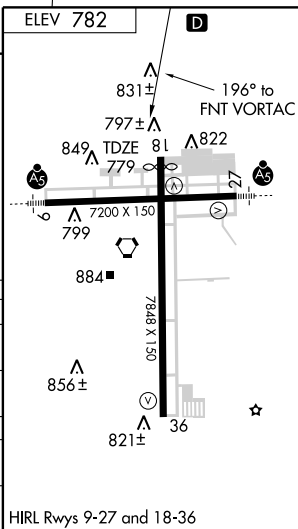
UNICOM  
**122.95**



CAUTION: Brightly lighted parking lot  
4000' east of approach end of Rwy 27  
can easily be confused for Rwy 27.



CATEGORY	A	B	C	D
S-18	1560 - 1 781 (800-1)	1560 - 1 ¼ 781 (800-1 ¼)	1560 - 2 ¼ 781 (800-2 ¼)	1560 - 2 ½ 781 (800-2 ½)
CIRCLING	1560 - 1 778 (800-1)	1560 - 1 ¼ 778 (800-1 ¼)	1560 - 2 ¼ 778 (800-2 ¼)	1560 - 2 ½ 778 (800-2 ½)
DME MINIMUMS				
S-18	1300 - 1 523 (600-1)	1300-1 ½ 523 (600-1 ½)	1300-1 ¾ 523 (600-1 ¾)	1340-2 558 (600-2)
CIRCLING	1300 - 1 518 (600-1)	1300 - 1 518 (600-1)	1300-1 ½ 518 (600-1 ½)	1340-2 558 (600-2)



HIRL Rwy 9-27 and 18-36

VORTAC FNT <b>116.9</b> Chan <b>116</b>	APP CRS <b>267°</b>	Rwy ldg TDZE Apt Elev	<b>7200</b> <b>770</b> <b>782</b>
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# VOR RWY 27

FLINT / BISHOP INTL (FNT)

ASR



MISSED APPROACH: Climbing right turn to 3000 via FNT R-334 to CLIOO INT and hold.

ATIS  
**133.15**

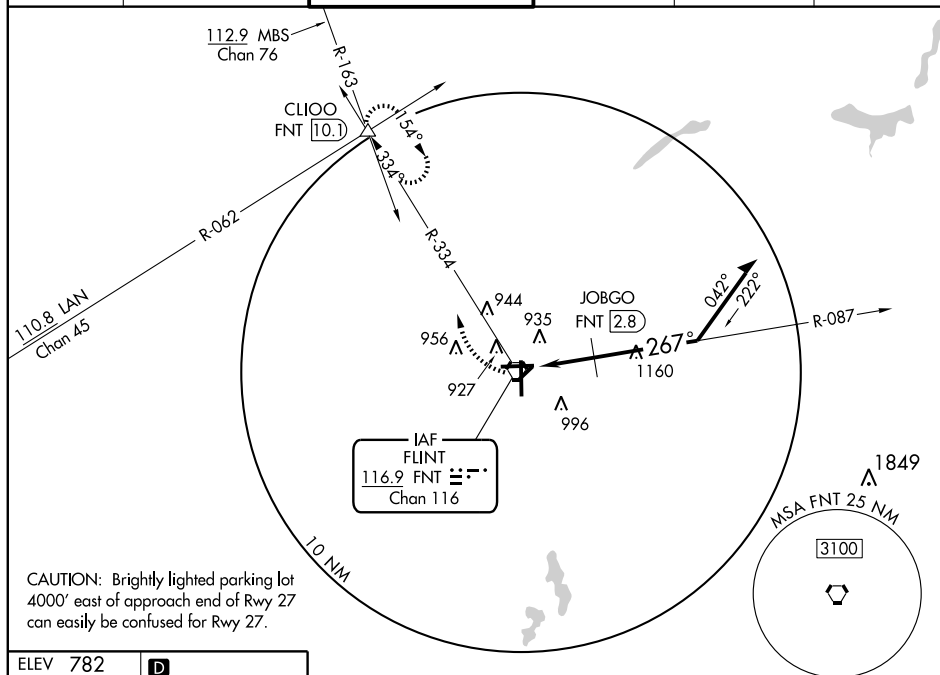
FLINT APP CON ★  
**118.8 257.9**

FLINT TOWER ★  
**126.3 (CTAF) 257.9**

GND CON  
**121.9**

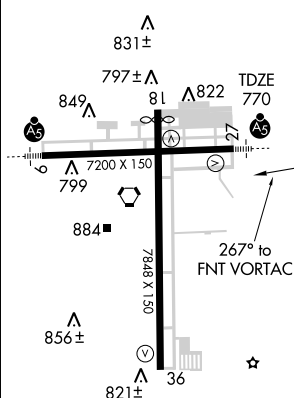
CLNC DEL  
**121.75**

UNICOM  
**122.95**


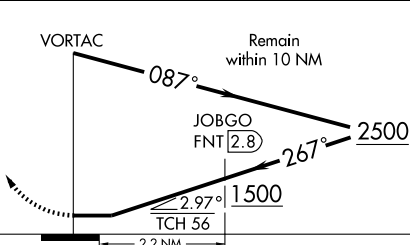


ELEV **782**

**D**



HIRL Rwy 9-27 and 18-36

<div><div>3000</div><div></div><div>FNT R-334 116.9</div></div> <div><div>CLIOO</div><div>△</div></div>		<div><div>VORTAC</div><div></div></div>		
CATEGORY	A	B	C	D
S-27	1500 - ½	730 (800-½)	1500 - 1½ 730 (800-1½)	1500 - 1¾ 730 (800-1¾)
CIRCLING	1500 - 1	718 (800-1)	1500 - 2 718 (800-2)	1500 - 2¼ 718 (800-2¼)
DME MINIMUMS				
S-27	1260 - ½	490 (500-½)	1260 - ¾ 490 (500-¾)	1260 - 1 490 (500-1)
CIRCLING	1280 - 1 498 (500-1)	1300 - 1 518 (600-1)	1300 - 1½ 518 (600-1½)	1340-2 558 (600-2)

FLINT, MICHIGAN

Orig 09351

42°58'N - 83°45'W

FLINT / BISHOP INTL (FNT)

# VOR RWY 27

VORTAC FNT <b>116.9</b> Chan <b>116</b>	APP CRS <b>359°</b>	Rwy ldg <b>7648</b> TDZE <b>782</b> Apt Elev <b>782</b>
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# VOR RWY 36

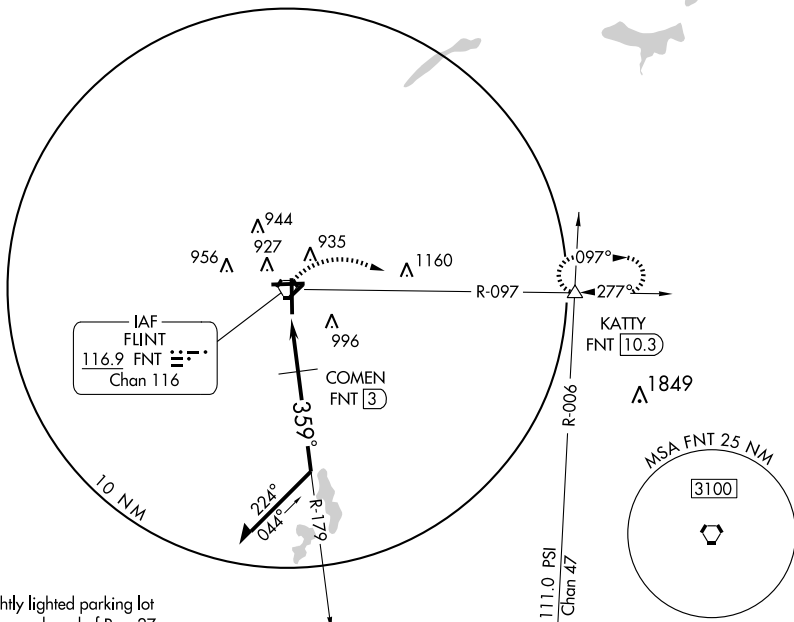
FLINT / BISHOP INTL (FNT)



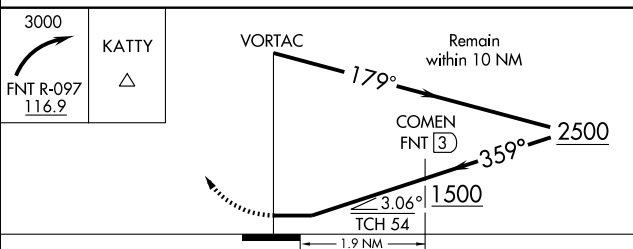
ASR

MISSED APPROACH: Climbing right turn to 3000  
via FNT R-097 to KATY INT/10.3 DME and hold.

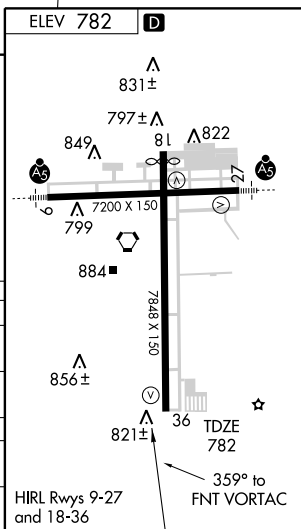
ATIS <b>133.15</b>	FLINT APP CON ★ <b>118.8 257.9</b>	FLINT TOWER ★ <b>126.3 (CTAF) 257.9</b>	GND CON <b>121.9</b>	CLNC DEL <b>121.75</b>	UNICOM <b>122.95</b>
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CAUTION: Brightly lit parking lot  
4000' east of approach end of Rwy 27  
can easily be confused for Rwy 27.



CATEGORY	A	B	C	D
S-36	1500 - 1	718 (800-1)	1500 - 2 718 (800-2)	1500 - 2 1/4 718 (800-2 1/4)
CIRCLING	1500 - 1	718 (800-1)	1500 - 2 718 (800-2)	1500 - 2 1/4 718 (800-2 1/4)
DME MINIMUMS				
S-36	1200 - 1	418 (500-1)	1200-1 1/4	418 (500-1 1/4)
CIRCLING	1280 - 1 498 (500-1)	1300 - 1 518 (600-1)	1300 - 1 1/2 518 (600-1 1/2)	1340-2 558 (600-2)



## FOWLerville

**MAPLE GROVE** (65G) 3 N UTC-5(-4DT) N42°43.04' W84°03.75'

DETROIT  
COPTER

908 S4 FUEL 100LL NOTAM FILE LAN

RWY 09-27: 3050X110 (TURF) LIRL

RWY 09: Thld dsplcd 200'. Ground.

RWY 27: Thld dsplcd 300'. Road.

RWY 18-36: 2000X113 (TURF)

RWY 18: Thld dsplcd 550'. P-line.

RWY 36: Thld dsplcd 275'. Road.

**AIRPORT REMARKS:** Attended irregularly. Parachute Jumping. Maple Grove Arpt is collocated with Maple Grove Heliport be alert for rotary wing acft. Extensive acft training, two-way radio communications rgr. ACTIVATE LIRL Rwy 09-27—CTAF. Rwy 09-27 marked with 8 by 12 inch reflective cylinders and 3' cones; dsplcd thld marked with three 3' yellow cones. Rwy 09-27 and Rwy 18-36 and dsplcd thlds marked with cones.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

**MAPLE GROVE HELIPORT** (E66) 4 N UTC-5(-4DT) N42°43.03' W84°03.72'

DETROIT  
COPTER

908 S4 NOTAM FILE LAN

HELIPAD H1: H32X32 (TURF)

HELIPAD H2: H12X12 (CONC)

HELIPAD H3: H20X20 (MATS)

**HELIPORT REMARKS:** Attended 1400-2200Z+. Maple Grove Heliport is collocated with Maple Grove Arpt, be alert for fixed wing acft. Extensive aircraft training, two-way communications required. Helipad H2 marked with cones. H1 gnd level helipad. H2 gnd level helipad. H3 raised level helipad. Max gross weight 3000 lbs. ACTIVATE H2 and H3 perimeter lgts and NSTD TRCV-123.025. H1, H2 and H3 FATO 70'x70'. Helipad H2 TRCV shines E. Helipad H3 TRCV shine N. Helipad H1 perimeter lgts. Helipad H2 and Helipad H3 NSTD TRCV.

**COMMUNICATIONS:** CTAF 122.8

## FRANKENMUTH

**WM "TINY" ZEHNDER FLD** (66G) 2 SE UTC-5(-4DT) N43°18.84' W83°42.58'

DETROIT

645 NOTAM FILE LAN

RWY 09-27: 2530X100 (TURF)

RWY 09: Thld dsplcd 400'. Road.

RWY 27: P-line.

**AIRPORT REMARKS:** Attended irregularly. Snow removal intermittent; verify condition call 989-652-3652 or 989-652-9371. Rwy 09-27 soft in spring and after heavy rain. Rwy 09, 7' ditch 60' from thld. Rwy 09-27 marked with 3' yellow cones including Rwy 09 dsplcd thld. Rwy 09-27 LIRL not for public use.

**COMMUNICATIONS:** CTAF 122.9

**FRANKFORT DOW MEMORIAL FIELD** (FKS) 2 SE UTC-5(-4DT) N44°37.51' W86°12.05'

GREEN BAY  
L-31B  
IAP

633 B FUEL 100LL NOTAM FILE LAN

RWY 15-33: H4050X75 (ASPH) S-25 MIRL 0.7% up NW

RWY 15: Thld dsplcd 1094'. Road.

RWY 33: REIL. PAPI(P2R)—GA 3.0° TCH 25'. Thld dsplcd 111'.

Trees.

**AIRPORT REMARKS:** Unattended. Fuel self-service with major credit card. Extensive soaring activity and glider towing ops W of rwy. Radio controlled model acft opr W of rwy. Deer and birds on and in/ov arpt. Arpt bcn located on hill 1.25 miles NW of arpt. ACTIVATE MIRL Rwy 15-33; REIL Rwy 33; PAPI Rwy 33—CTAF.

**WEATHER DATA SOURCES:** AWOS-3 118.325 (231) 352-7573.

**COMMUNICATIONS:** CTAF/UNICOM 123.05

® MINNEAPOLIS CENTER APP/DEP CON 132.9

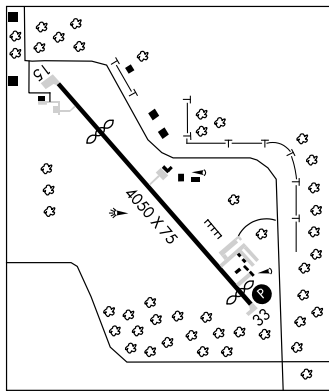
GCO 121.725 (MINNEAPOLIS CENTER and FLIGHT SERVICES)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE MBL.

MANISTEE (L) VOR/DME 111.4 MBL Chan 51 N44°16.24'

W86°15.24' 011° 21.4 NM to fld. 618/5W.

**COMM/NAV/WEATHER REMARKS:** AWOS-3 wind unreliable.

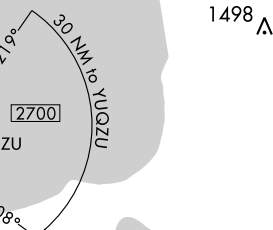
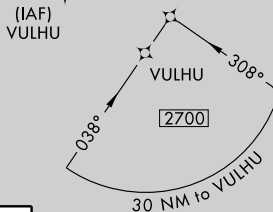
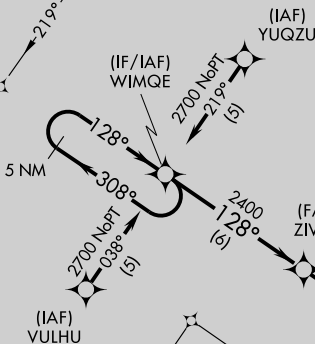
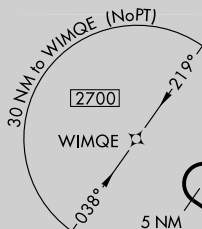
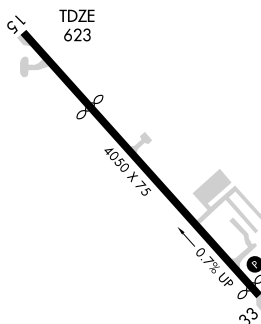
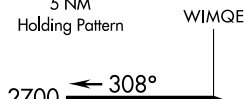




APP CRS  
**128°**Rwy Idg **2956**  
TDZE **623**  
Apt Elev **633****RNAV (GPS) RWY 15**  
FRANKFORT DOW MEMORIAL FIELD (F'KS)

If local altimeter setting not received, use Manistee altimeter setting and increase all MDA's 60 feet. Visibility reduction by helicopters NA. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climbing right turn to 2700 direct WIMQE and hold.

AWOS-3  
**118.325**MINNEAPOLIS CENTER  
**132.9 338.3**GCO  
**121.725**UNICOM  
**123.05 (CTAF) 0**ELEV **633**5 NM  
Holding Pattern

ZIVKU

2400

3.06°

TCH 35

HUSDI

6 NM

5 NM

0.4

2700

WIMQE



CATEGORY	A	B	C	D
LNNAV MDA	1220-1	597 (600-1)	1220-1½ 597 (600-1½)	NA
CIRCLING	1320-1	687 (700-1)	1520-2¾ 887 (900-2¾)	NA

MIRL Rwy 15-33 0  
REIL Rwy 33 0

APP CRS **338°**  
 Rwy Idg **3939**  
 TDZE **606**  
 Apt Elev **633**

# RNAV (GPS) RWY 33

FRANKFORT DOW MEMORIAL FIELD (F'KS)

**▽** DME/DME RNP-0.3 NA. If local altimeter setting not received, use  
**▲** Manistee altimeter setting and increase all MDA's 60 feet.  
 Visibility reduction by helicopters NA.

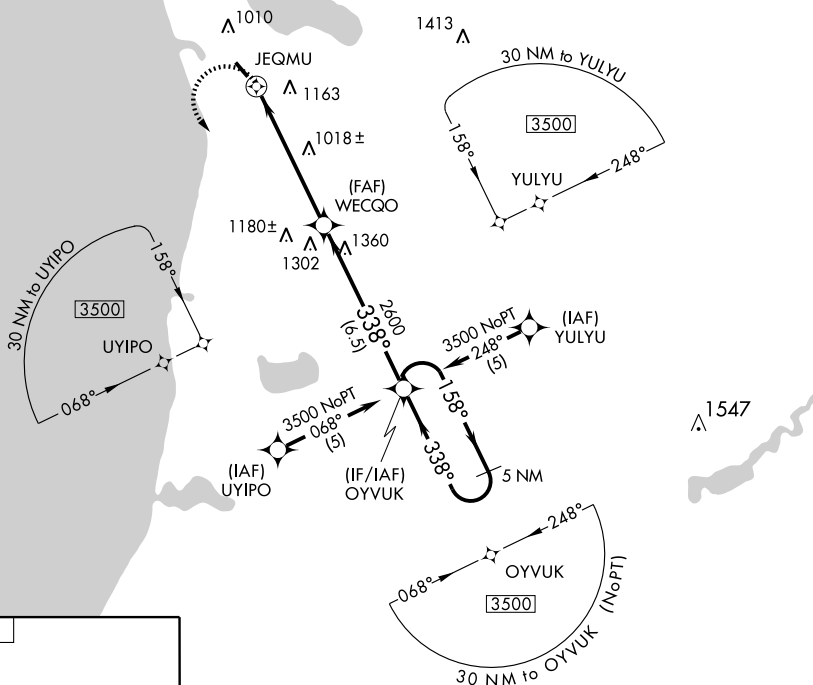
MISSED APPROACH: Climbing left turn to  
 3500 direct OYVUK and hold.

AWOS-3  
**118.325**

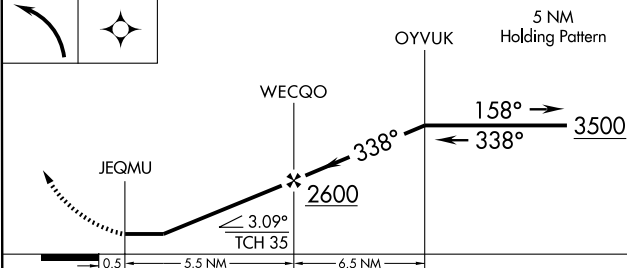
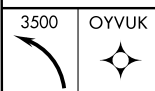
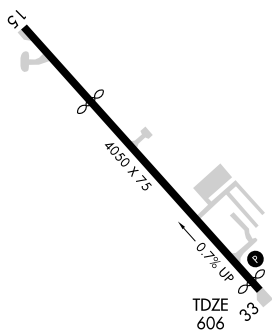
MINNEAPOLIS CENTER  
**132.9 338.3**

GCO  
**121.725**

UNICOM  
**123.05 (CTAF) 0**



ELEV **633**



CATEGORY	A	B	C	D
LNNAV MDA	1320-1	714 (800-1)	1320-2 714 (700-2)	NA
CIRCLING	1320-1	687 (700-1)	1520-2¾ 887 (900-2¾)	NA

MIRL Rwy 15-33 **0**  
 REIL Rwy 33 **0**

VOR/DME MBL  
**111.4**  
Chan **51**

APP CRS  
011°

Rwy Idg	N/A
TDZE	N/A
Apt Elev	633

N/A  
N/A  
633

VOR/DME-A

FRANKFORT DOW MEMORIAL FIELD (FKS)



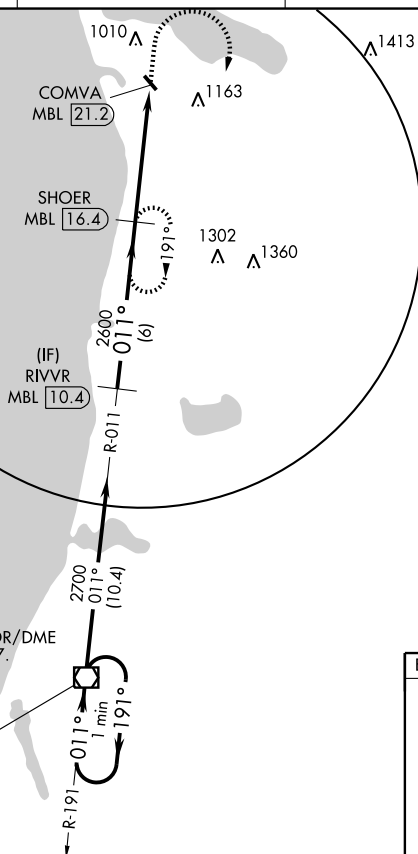
If local altimeter setting not received, use Manistee altimeter setting and increase all MDA's 60 feet.

**MISSED APPROACH:** Climb to 2000, then climbing right turn to 2600 via MBL R-011 to SHOER/MBL 16.4 DME and hold.

AWOS-3  
118,325

MINNEAPOLIS CENTER  
132.9 338.3

GCO  
**121.725**

UNICOM  
123.05 (CTAF) **L**

NoPT for arrival on MBL VOR/DME  
airway radials 156 CW 177.

IAF  
MANISTEE  
111.4 MBL  
Chan 51

## One Minute Holding Pattern

VOR/DME

MBL 10.4

SHOER

2000

2600

SHOER  
MRI

16.4

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011° 4.8 NM  
from FAF

MIRL Rwy 15-33 **L**  
REIL Rwy 33 **L**

CATEGORY

A

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1480-1  
847 (900-1)

1480-11/847 (900-11/847)

1520-2 $\frac{3}{4}$   
887 (900-2 $\frac{3}{4}$ )

N

FRANKFORT, MICHIGAN

Amdt 1 09295

44°38'N - 86°12'W

FRANKFORT DOW MEMORIAL FIELD (FKS)

VOR/DME-A

EC-1, 23 SEP 2010 to 21 OCT 2010

**FREMONT MUNI** (FFX) 3 SW UTC-5(-4DT) N43°26.36' W85°59.69'

772 B S4 FUEL 100LL, JET A NOTAM FILE LAN

RWY 18-36: H6498X100 (ASPH) S-30 MIRL

RWY 18: REIL. PAPI(P4L)—GA 3.0° TCH 25'. P-line.

RWY 36: REIL. VASI(V2L)—GA 3.0° TCH 45'. Tree.

RWY 09-27: H3502X75 (ASPH) S-16 MIRL

RWY 27: PAPI(P4L)—GA 3.7° TCH 25'. Trees.

**AIRPORT REMARKS:** Attended 1300Z±-dusk. For svc after hrs call

231-821-0494. Parachute Jumping. Skydiving activity summer months, weekends SR-SS, occasional weekdays noon-SS.

Seaplane activity on adjacent lake .5 mile NE of arpt. Rwy 18-36 pavement cracking and loose stones on pavement. +8' crops adjacent to rwys during growing season. PAPI Rwy 18 OTS indef.

ACTIVATE MIRL Rwy 09-27 and Rwy 18-36, REIL Rwy 18 and Rwy 36, VASI Rwy 36 and PAPI Rwy 18 and Rwy 27—CTAF.

**WEATHER DATA SOURCES:** AWOS-3 118.775 (231) 928-0715.

**COMMUNICATIONS:** CTAF/UNICOM 123.0

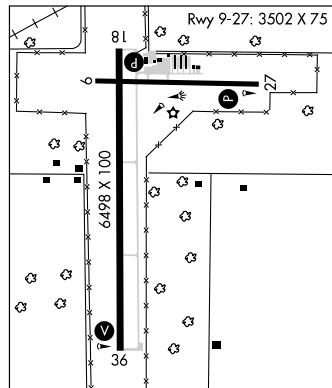
Ⓡ MUSKEGON APP/DEP CON 119.8 (1100-0400Z±) CLNC DEL 118.25

Ⓡ CHICAGO CENTER APP/DEP CON 128.5 (0400-1100Z±)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE MKG.

MUSKEGON (L) VORTACW 115.2 MKG Chan 99 N43°10.16'

W86°02.36' 008° 16.3 NM to fld. 659/1W. HIWAS.



CHICAGO

H-2L, 10F, L-28I

IAP

## FRUITPORT

**FLYING-A-RANCH** (39Z) 2 SE UTC-5(-4DT) N43°06.30' W86°07.42'

630 S4 TPA-1430(800) NOTAM FILE LAN

RWY 09-27: 1925X70 (TURF)

RWY 09: Thld dsplcd 327'. Trees.

RWY 27: Trees. Rgt tfc.

**AIRPORT REMARKS:** Attended irregularly. Arpt is CLOSED Nov-Mar. No snow removal. Fuel avbl for emerg use only. Rwy 09-27 and dsplcd thld marked with 3' yellow cones. Rwy 09-27 LIRL not for public use.

**COMMUNICATIONS:** CTAF 122.9

CHICAGO

**GALEY** N47°06.94' W88°24.07' NOTAM FILE CMX.

NDB (MHW/L0M) 275 CM 313° 4.8 NM to Houghton Co Mem. Unmonitored.

GREEN BAY

L-14J

**GARLAND** (See LEWISTON)

**GAVAGAN FLD** (See YALE)

**GAYLORD** N45°00.75' W84°42.26' NOTAM FILE LAN.

(L) VORW/DME 109.2 GLR Chan 29 at Gaylord Rgnl. 1318/4W.

VOR portion unusable 182°-195°. DME unusable byd 30 NM blo 3500'.

RCQ 122.55 (LANSING RADIO)

LAKE HURON

L-31C

WAAS Chan <b>82405</b> <b>W18A</b>	APP CRS <b>184°</b>	Rwy Idg TDZE <b>770</b> Apt Elev <b>772</b>	<b>6498</b>
--	------------------------	---	-------------

# RNAV (GPS) RWY 18

FREMONT MUNI (FFX)

When local altimeter setting not received, use Muskegon altimeter setting and increase all DA 65 feet, and all visibilities  $\frac{1}{4}$  mile, increase all MDA 80 feet, and Cat C/D visibilities  $\frac{1}{4}$  mile. VDP NA when using Muskegon altimeter setting. Baro-VNAV NA when using Muskegon altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.

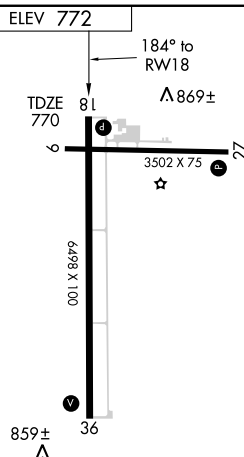
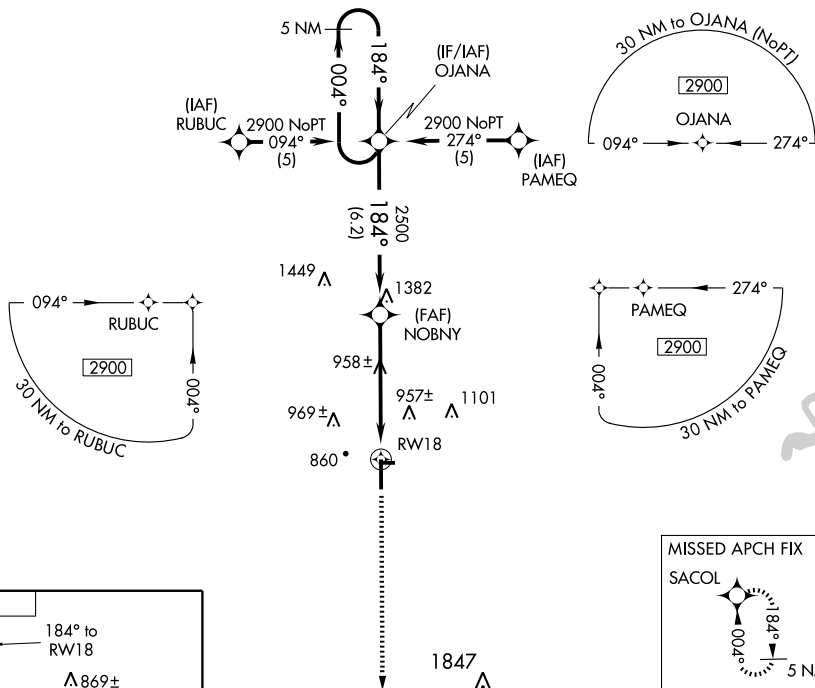
**MISSED APPROACH:**  
Climb to 2900 direct  
SACOL and hold.

AWOS-3  
**118.775**



MUSKEGON APP CON ★  
**119.8 339.1**

CLNC DEL  
**118.25**

UNICOM  
**123.0 (CTAF) 0**



REIL Rwy 18 and 36  
MIRL Rwy 9-27 and 18-36

2900 ↑		SACOL 		VGSI and RNAV glidepath not coincident.		OJANA		5 NM Holding Pattern	
		RW18		*1.3 NM to RW18		NOBNY ✕		184° 004° → 2900 ← 184°	
		1.3		*LNAV only		2500		GS 3.00° TCH 40	
		1.3		3.9 NM		6.2 NM			
CATEGORY		A		B		C		D	
LPV DA				1075-1		305 (400-1)			
LNAV/ VNAV DA				1169-1½		399 (400-1½)			
LNAV MDA		1220-1		450 (500-1)		1220-1¼ 450 (500-1¼)		1220-1½ 450 (500-1½)	
CIRCLING		1260-1		488 (500-1)		1260-1½ 488 (500-1½)		1340-2 568 (600-2)	

WAAS Chan <b>56505</b> <b>W36A</b>	APP CRS <b>004°</b>	Rwy Idg TDZE Apt Elev	<b>6498</b> <b>760</b> <b>772</b>
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## RNAV (GPS) RWY 36

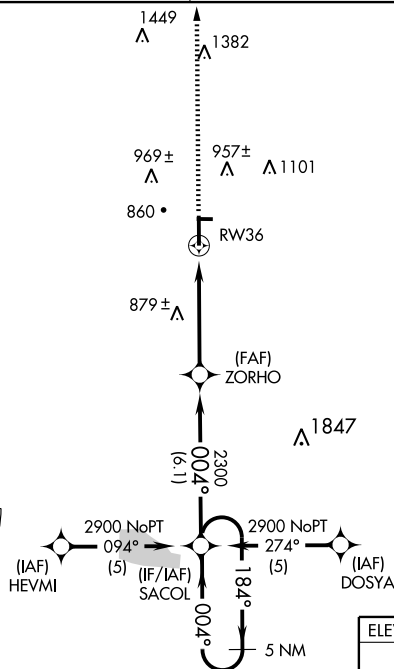
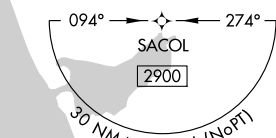
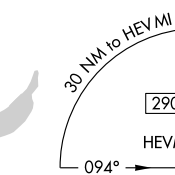
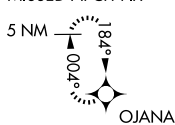
FREMONT MUNI (FFX)

When local alimeter setting not received, use Muskegon alimeter setting and increase all DA 65 feet, and all visibilities ¼ mile, increase all MDA 80 feet, and Cat C/D visibilities ¼ mile. VDP NA when using Muskegon alimeter setting. Baro-VNAV NA when using Muskegon alimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.

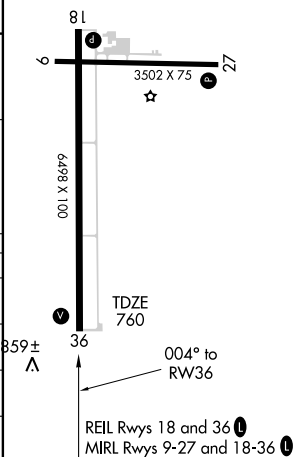
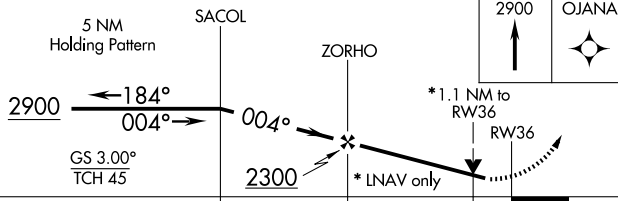
MISSED APPROACH:  
Climb to 2900 direct  
OJANA and hold.

AWOS-3  
**118.775**MUSKEGON APP CON ★  
**119.8 339.1**CLNC DEL  
**118.25**UNICOM  
**123.0 (CTAF) ①**

MISSED APCH FIX



ELEV 772



CATEGORY	A	B	C	D
LPV DA	1036-1 276 (300-1)			
LNAV/VNAV DA	1129-1¼ 369 (400-1¼)			
LNAV MDA	1140-1 380 (400-1)			1140-1¼ 380 (400-1¼)
CIRCLING	1260-1 488 (500-1)	1260-1½ 488 (500-1½)	1340-2 568 (600-2)	



VORTAC MKG	APP CRS	Rwy Idg	6498
115.2	008°	TDZE	760
Chan 99		Apt Elev	772

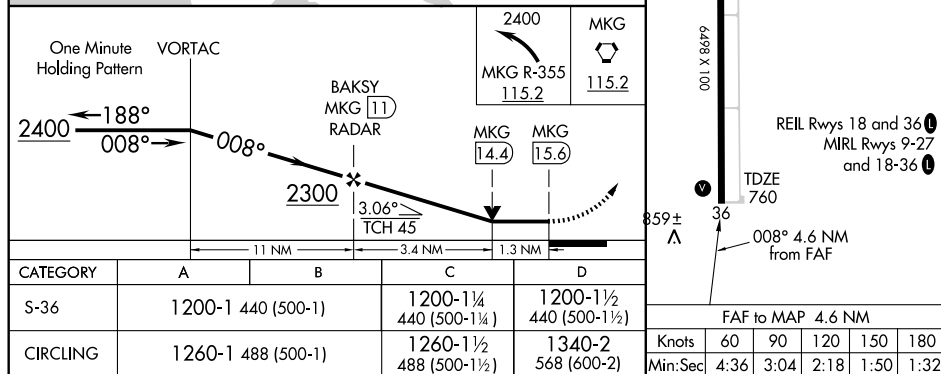
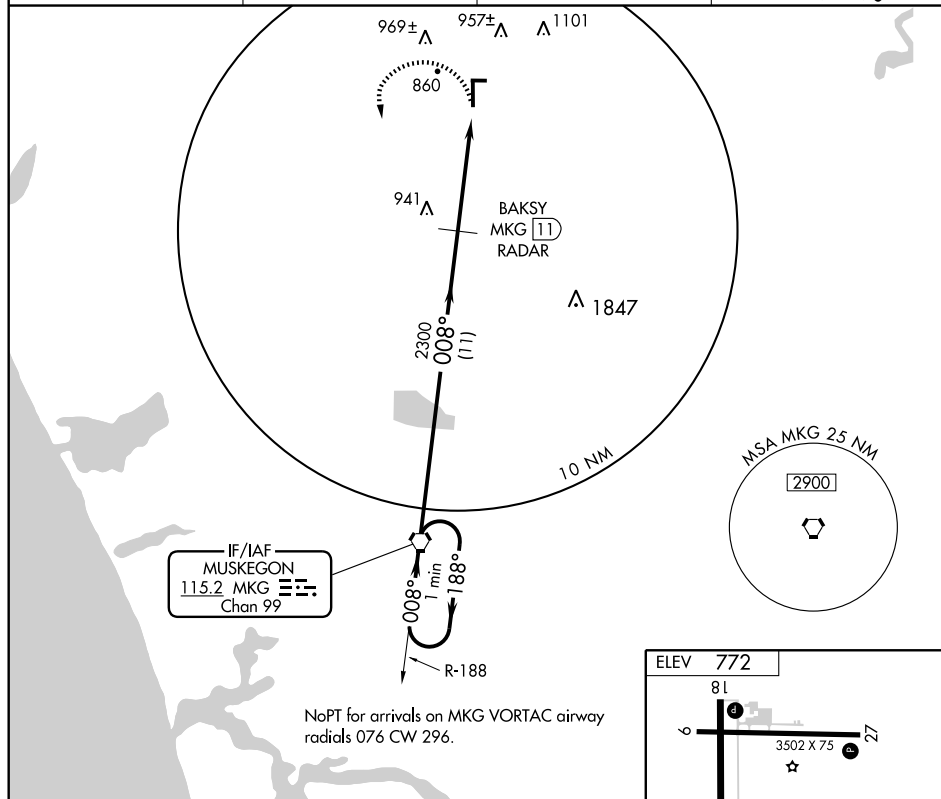
# VOR RWY 36

FREMONT MUNI (FFX)

**T** DME or RADAR required. Visibility reduction by helicopters NA. When local altimeter setting not received, use Muskegon altimeter setting and increase all S-36 MDA 80 feet, and Circling Cats A/B/C MDA 80 feet; increase S-36 Cat D visibility ¼ mile. VDP NA when using Muskegon altimeter setting.

MISSED APPROACH: Climbing left turn to 2400 via MKG VORTAC R-355 to MKG VORTAC and hold.

AWOS-3	MUSKEGON APP CON *	CLNC DEL	UNICOM
118.775	119.8 339.1	118.25	123.0 (CTAF) 0





**GAYLORD RGNL** (GLR) 1 SW UTC-5(-4DT) N45°00.82' W84°42.22'

LAKE HURON

1328 B S4 FUEL 100LL, JET A NOTAM FILE GLR

H-2L, L-31C

RWY 09-27: H6578X150 (ASPH) D-100, 2S-127 HIRL

IAP

RWY 09: MALSR. PAPI(P4L)—GA 3.0° TCH 25'. Trees.

RWY 27: REIL. PAPI(P4L)—GA 3.0° TCH 25'. Trees.

RWY 18-36: H3319X75 (ASPH) S-12.5 MIRL

RWY 18: PAPI(P4R)—GA 3.0° TCH 40'. Road.

RWY 36: PAPI(P4R)—GA 3.0° TCH 40'. Road.

**AIRPORT REMARKS:** Attended Mon-Fri 1200-0100Z, Sat-Sun 1300-0100Z. For attendant after hours call 989-732-4218 during attended hours. After hours call 989-370-9484 (manager cell). Unattended Thanksgiving, Christmas and New Years Day. Deer and birds on and in/ov arpt. Rwy 18-36 extensive cracking in pavement. Landing fee for turbines, jets and twins. Landing fee waived with minimum fuel purchase. Overnight parking fee. Military training activity in/ov arpt associated with Restricted Area R4201A/B. ACTIVATE HIRL Rwy 09-27 and MIRL Rwy 18-36; REIL Rwy 27 and MALSR Rwy 09—CTAF.

**WEATHER DATA SOURCES:** ASOS 118.375 (989) 732-1571.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

GAYLORD RCO 122.55 (LANSING RADIO)

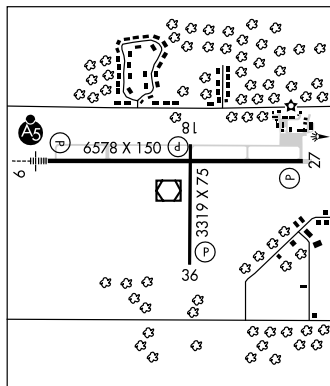
Ⓡ MINNEAPOLIS CENTER APP/DEP CON 134.6

**RADIO AIDS TO NAVIGATION:** NOTAM FILE LAN.

GAYLORD (L) VORW/DME 109.2 GLR Chan 29 N45°00.75' W84°42.26' at fld. 1318/4W.

BANGU NDB (LOM) 375 GL N45°00.88' W84°48.48' 097° 4.4 NM to fld.

ILS 111.1 I-GLR Rwy 09. Class IE. LOM BANGU NDB Unmonitored.



**LAKES OF THE NORTH** (4Y4) 11 SW UTC-5(-4DT) N44°54.75' W84°52.59'

LAKE HURON

1286 B NOTAM FILE LAN

L-31B

RWY 05-23: H4285X40 (ASPH) LIRL

RWY 05: Thld dspcd 400'. Road.

RWY 23: Thld dspcd 450'. Road.

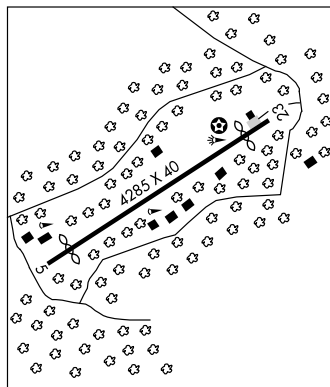
**AIRPORT REMARKS:** Attended 1400-2200Z, Sat 1400-1800Z. Deer on and in/ov arpt. Rwy 05-23 sfc rough and uneven, extensive cracks in pavement. Rwy slopes upward from E to W. West end approximately 20' higher than E end. Acft parking in primary sfc, N side, E end. ACTIVATE arpt beacon and LIRL Rwy 05-23—CTAF.

**COMMUNICATIONS:** CTAF 122.9

GAYLORD RCO 122.55 (LANSING RADIO)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE LAN.

GAYLORD (L) VORW/DME 109.2 GLR Chan 29 N45°00.75' W84°42.26' 237° 9.5 NM to fld. 1318/4W.



## GENESEE

**DUFORD FLD** (68G) 1 NW UTC-5(-4DT) N43°07.50' W83°37.58'

DETROIT

773 NOTAM FILE LAN

RWY 18-36: 3068X100 (TURF)

RWY 18: Thld dspcd 200'. Trees.

RWY 36: Thld dspcd 1020'. Tree.

**AIRPORT REMARKS:** Attended irregularly. Rwy 18-36 sfc rough with irregular mowing. Rwy 18-36 marked with 3' yellow cones.

**COMMUNICATIONS:** CTAF 122.9

**GERALD R FORD INTL** (See GRAND RAPIDS)

**GIPPER** N41°46.12' W86°19.11'. NOTAM FILE LAN.

CHICAGO

(H) VORTACW 115.4 GIJ Chan 101 179° 3.6 NM to South Bend Rgnl.

H-5E, 10F, L-26I

804/OE. HIWAS.

VOR portion unusable 199°-219° blo 17,500' and between 25 and 36 NM.



LOM GL  
**375**

APP CRS  
096°

Rwy Idg	<b>6578</b>
TDZE	<b>1319</b>
Apt Elev	<b>1328</b>

**NDB RWY 9**  
GAYLORD RGNL (GLR)



MALSR

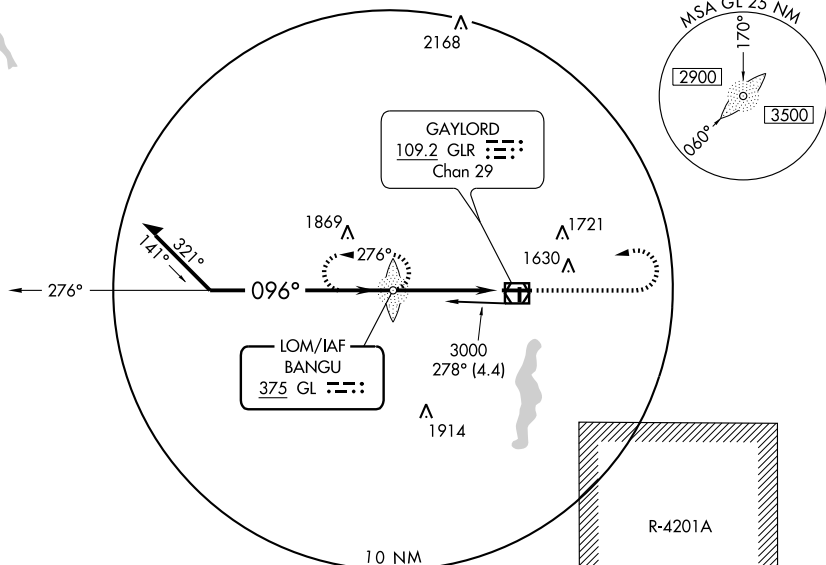


**MISSED APPROACH:** Climb to 3000, then left turn direct GL LOM and hold.

ASOS  
118,375

MINNEAPOLIS CENTER  
134.6 354.05

UNICOM  
122.8 (CTAF) **L**



R-4201A

ELEV 1328

Remain  
within 10 NM

LOM

300C

06°

2400

---

— 3.9 N

CATEGORY

A

---

C

-9

1780-3/4 461 (500-3/4)

1780-1¼

CIRCUINO

1840-1

1940-1

1940-13 $\frac{3}{4}$ 

2080-2½

REIL Rwy 27 **L**  
MIRL Rwy 18-36 **L**  
HIRL Rwy 9-27 **L**

FAF to MAP 3.9 NM

Knots	60	90	120	150	180
Min:Sec	3:54	2:36	1:57	1:34	1:18

GAYLORD, MICHIGAN

Amdt 12A 10154

GAYLORD RGNL (GLR)

NDB RWY 9

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1. 23 SEP 2010 to 21 OCT 2010

VOR/DME GLR  
**109.2**  
Chan **29**

APP CRS  
**104°**

Rwy ldg **6578**  
TDZE **1319**  
Apt Elev **1328**

**VOR or GPS RWY 9**  
GAYLORD RGNL (GLR)



MALSR

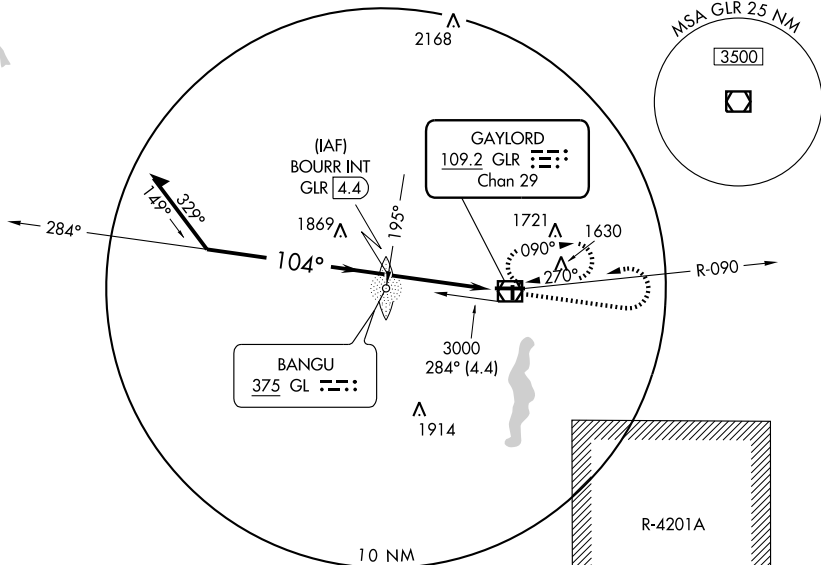


MISSED APPROACH: Climb to 3000, then  
left turn direct GLR VOR/DME and hold.

ASOS  
**118.375**

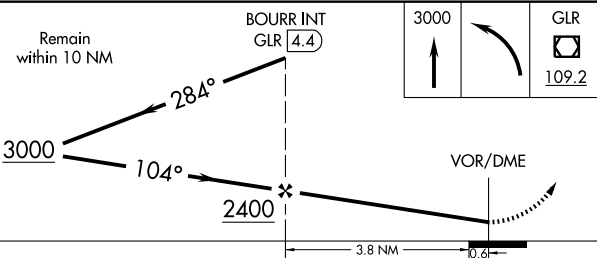
MINNEAPOLIS CENTER  
**134.6 354.05**

UNICOM  
**122.8 (CTAF) 0**

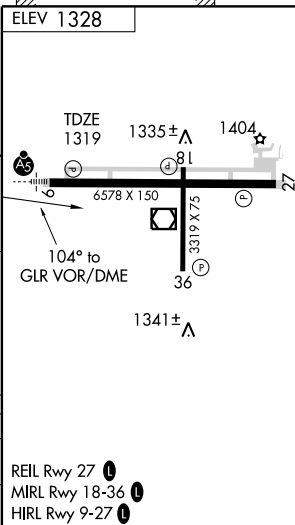


ADF or DME REQUIRED

△ 2470



CATEGORY	A	B	C	D
S-9	1700-½ 381 (400-½)			1700-1 381 (400-1)
CIRCLING	1840-1 512 (600-1)	1940-1 612 (700-1)	1940-1¾ 612 (700-1¾)	2080-2½ 752 (800-2½)



VOR/DME GLR  
**109.2**  
Chn **29**

APP CRS  
**270°**

Rwy Idg	<b>6578</b>
TDZE	<b>1328</b>
Apt Elev	<b>1328</b>

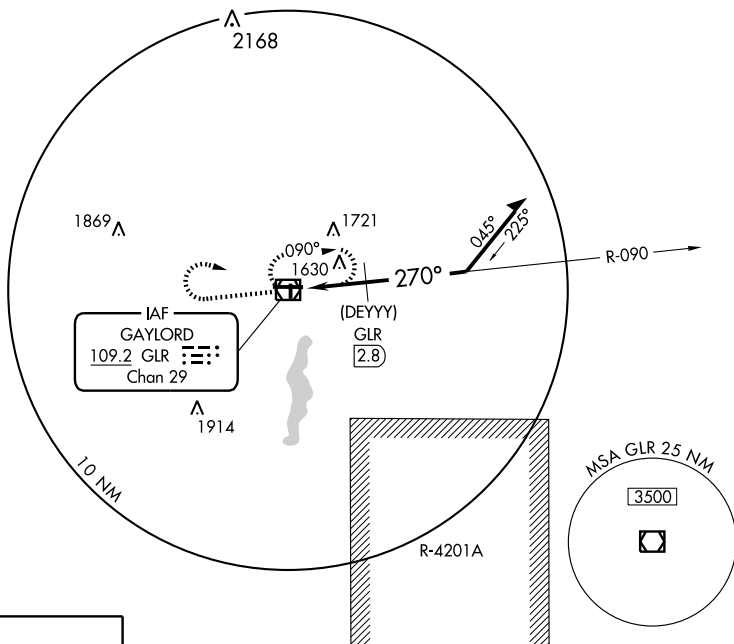
VOR or GPS RWY 27  
GAYLORD RGNL (GLR)



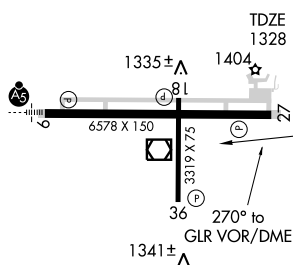
**MISSED APPROACH:** Climb to 3000, then right turn direct GLR VOR/DME and hold.

ASOS  
118,375

MINNEAPOLIS CENTER  
134.6 354.05

UNICOM  
122.8 (CTAF) **L**

ELEV 1328



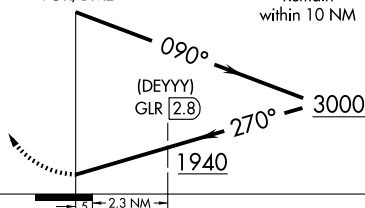
3000



GLR  
  
100%

VOR/DME

Remain  
within 10 NM



CATEGORY	A	B	C	D
S-27	1940-1 612 (700-1)		1940-1¾ 612 (700-1¾)	1940-2 612 (700-2)
CIRCLING	1940-1 612 (700-1)		1940-1¾ 612 (700-1¾)	2080-2½ 752 (800-2½)
DME MINIMUMS				
S-27	1880-1 552 (600-1)		1880-1½ 552 (600-1½)	1880-1¾ 552 (600-1¾)
CIRCLING	1880-1 552 (600-1)	1940-1 612 (700-1)	1940-1¾ 612 (700-1¾)	2080-2½ 752 (800-2½)

REIL Rwy 27 **L**  
MIRL Rwy 18-36 **L**  
HIRL Rwy 9-27 **L**

GAYLORD, MICHIGAN  
Amdt 1A 10154

45°01'N - 84°42'W

GAYLORD RGNL (GLR)  
VOR or GPS RWY 27

EC-1. 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010

**GLADWIN ZETTEL MEML** (GDW) 1 SE UTC-5(-4DT) N43°58.24' W84°28.50'

776 B FUEL 100LL, JET A TPA-1776(1000) NOTAM FILE LAN

RWY 09-27: H4700X75 (ASPH) S-44, D-60, 2D-90 MIRL

RWY 09: REIL. PAPI(P2L)—GA 3.0°. Trees.

RWY 27: REIL. PAPI(P2L). Trees.

RWY 15-33: 2500X150 (TURF)

RWY 15: Trees. RWY 33: Trees.

**AIRPORT REMARKS:** Attended 1400-2200Z±. Except Christmas; New Years; Thanksgiving and Easter; for attendant and after hrs call 989-578-2174. Rwy 15-33 CLOSED when snow covered except ski-equipped acft. Rwy 15-33 marked with 3' yellow cones. Deer activity on and invof arpt. Radio Control acft ops near W side of Rwy 15-33. ACTIVATE MIRL Rwy 09-27; PAPI and REIL Rwy 09 and Rwy 27—CTAF.

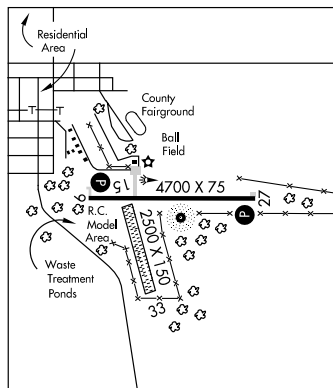
**COMMUNICATIONS:** CTAF/UNICOM 122.8⑧ **SAGINAW APP/DEP CON** 126.45 (1100-0400Z±)**CLEVELAND CENTER APP/DEP CON** 127.7 (0400-1100Z±)**RADIO AIDS TO NAVIGATION:** NOTAM FILE MBS.

SAGINAW (L) VORW/DME 112.9 MBS Chan 76 N43°31.90'

W84°04.64' 330° 31.5 NM to fld. 663/3W. HIWAS.

WIGGINS NDB (MHW) 209 GDW N43°58.20' W84°28.50' at fld.

NOTAM FILE LAN.

**GLOWACKI** (See ST JOHNS)**GOGEBIC-IRON CO** (See IRONWOOD)**GRADOLPH FLD** (See PETERSBURG)**GRAND HAVEN MEML AIRPARK** (3GM) 2 SE UTC-5(-4DT) N43°02.04' W86°11.89'

604 B S4 FUEL 100LL NOTAM FILE LAN

RWY 09-27: H3752X75 (ASPH) S-8 MIRL 0.3% up W

RWY 09: REIL. PAPI(P2L)—GA 3.0° TCH 32'. Tree.

RWY 27: REIL. PAPI(P2L)—GA 4.0° TCH 54'. Trees.

RWY 18-36: H2058X60 (ASPH) S-8 MIRL 0.3 up N

RWY 18: Road. RWY 36: Tree.

**AIRPORT REMARKS:** Attended 1300Z±-dusk. Radio control acft flying area NW side of Rwy 18. ACTIVATE MIRL Rwy 09-27 and 18-36; REIL and PAPI Rwy 09 and 27—CTAF.

**COMMUNICATIONS:** CTAF/UNICOM 122.7⑧ **MUSKEGON APP/DEP CON** 119.8 (1100-0400Z±)⑧ **CHICAGO CENTER APP/DEP CON** 128.5 (0400-1100Z±)**RADIO AIDS TO NAVIGATION:** NOTAM FILE MKG.

MUSKEGON (L) VORTACW 115.2 MKG Chan 99 N43°10.16'

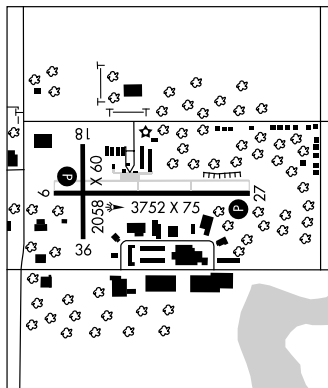
W86°02.36' 222° 10.7 NM to fld. 659/1W.

HIWAS.

CHICAGO

L-281

IAP



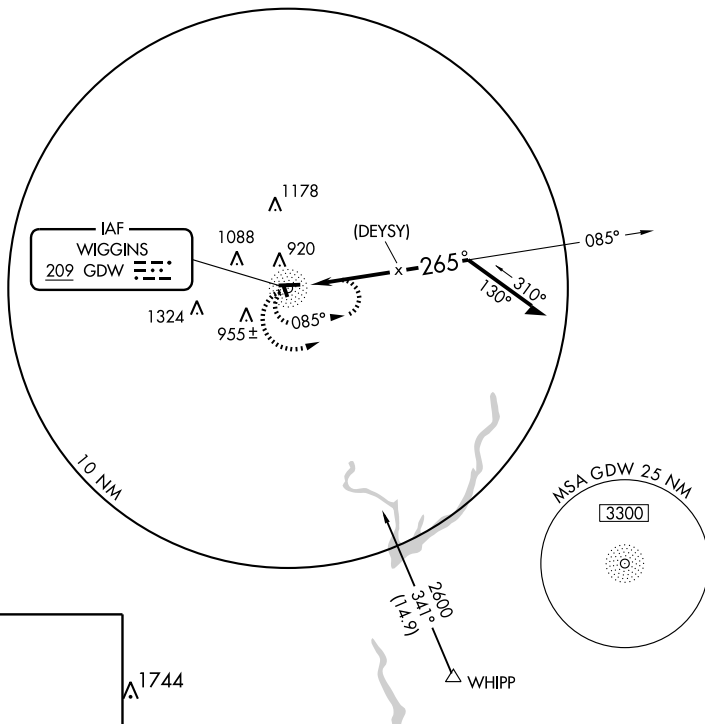
NDB GDW <b>209</b>	APP CRS <b>265°</b>	Rwy ldg TDZE Apt Elev	<b>4700</b> <b>773</b> <b>776</b>
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# NDB or GPS RWY 27

GLADWIN ZETTEL MEMORIAL (GDW)



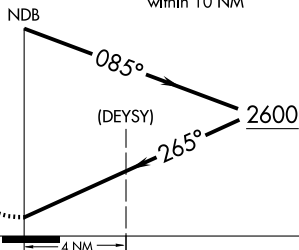
Use Saginaw, MI altimeter setting.

MISSED APPROACH: Climbing left turn  
to 2600 in GDW NDB holding pattern.SAGINAW APP CON ★  
**126.45 236.625**UNICOM  
**122.8 (CTAF) 0**

ELEV 776

1744

2600	GDW
	209

Remain  
within 10 NMMIRL Rwy 9-27 0  
REIL Rwy 9 and 27 0

Knots	60	90	120	150	180
Min:Sec					

CATEGORY	A	B	C	D
S-27	1420-1	647 (700-1)	1420-1¾ 647 (700-1¾)	1420-2 647 (700-2)
CIRCLING	1440-1 664 (700-1)	1520-1¼ 744 (800-1¼)	1520-2¼ 744 (800-2¼)	1520-2½ 744 (800-2½)

**GLADWIN ZETTEL MEML** (GDW) 1 SE UTC-5(-4DT) N43°58.24' W84°28.50'

776 B FUEL 100LL, JET A TPA-1776(1000) NOTAM FILE LAN

RWY 09-27: H4700X75 (ASPH) S-44, D-60, 2D-90 MIRL

RWY 09: REIL. PAPI(P2L)—GA 3.0°. Trees.

RWY 27: REIL. PAPI(P2L). Trees.

RWY 15-33: 2500X150 (TURF)

RWY 15: Trees. RWY 33: Trees.

**AIRPORT REMARKS:** Attended 1400-2200Z±. Except Christmas; New Years; Thanksgiving and Easter; for attendant and after hrs call 989-578-2174. Rwy 15-33 CLOSED when snow covered except ski-equipped acft. Rwy 15-33 marked with 3' yellow cones. Deer activity on and invof arpt. Radio Control acft ops near W side of Rwy 15-33. ACTIVATE MIRL Rwy 09-27; PAPI and REIL Rwy 09 and Rwy 27—CTAF.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

⑧ SAGINAW APP/DEP CON 126.45 (1100-0400Z±)

CLEVELAND CENTER APP/DEP CON 127.7 (0400-1100Z±)

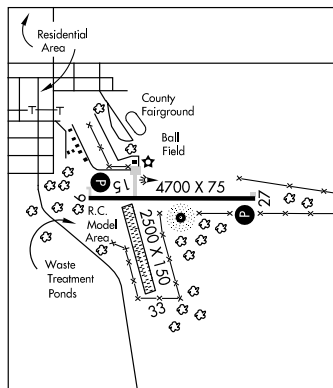
**RADIO AIDS TO NAVIGATION:** NOTAM FILE MBS.

SAGINAW (L) VORW/DME 112.9 MBS Chan 76 N43°31.90'

W84°04.64' 330° 31.5 NM to fld. 663/3W. HIWAS.

WIGGINS NDB (MHW) 209 GDW N43°58.20' W84°28.50' at fld.

NOTAM FILE LAN.

**GLOWACKI** (See ST JOHNS)**GOGEBIC-IRON CO** (See IRONWOOD)**GRADOLPH FLD** (See PETERSBURG)**GRAND HAVEN MEML AIRPARK** (3GM) 2 SE UTC-5(-4DT) N43°02.04' W86°11.89'

604 B S4 FUEL 100LL NOTAM FILE LAN

RWY 09-27: H3752X75 (ASPH) S-8 MIRL 0.3% up W

RWY 09: REIL. PAPI(P2L)—GA 3.0° TCH 32'. Tree.

RWY 27: REIL. PAPI(P2L)—GA 4.0° TCH 54'. Trees.

RWY 18-36: H2058X60 (ASPH) S-8 MIRL 0.3 up N

RWY 18: Road. RWY 36: Tree.

**AIRPORT REMARKS:** Attended 1300Z±-dusk. Radio control acft flying area NW side of Rwy 18. ACTIVATE MIRL Rwy 09-27 and 18-36; REIL and PAPI Rwy 09 and 27—CTAF.

**COMMUNICATIONS:** CTAF/UNICOM 122.7

⑧ MUSKEGON APP/DEP CON 119.8 (1100-0400Z±)

⑧ CHICAGO CENTER APP/DEP CON 128.5 (0400-1100Z±)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE MKG.

MUSKEGON (L) VORTACW 115.2 MKG Chan 99 N43°10.16'

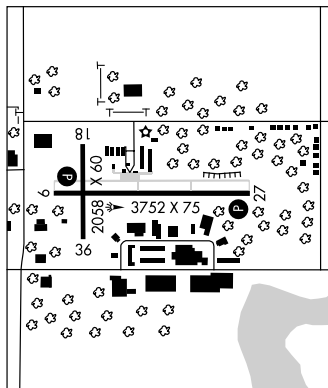
W86°02.36' 222° 10.7 NM to fld. 659/1W.

HIWAS.

CHICAGO

L-281

IAP





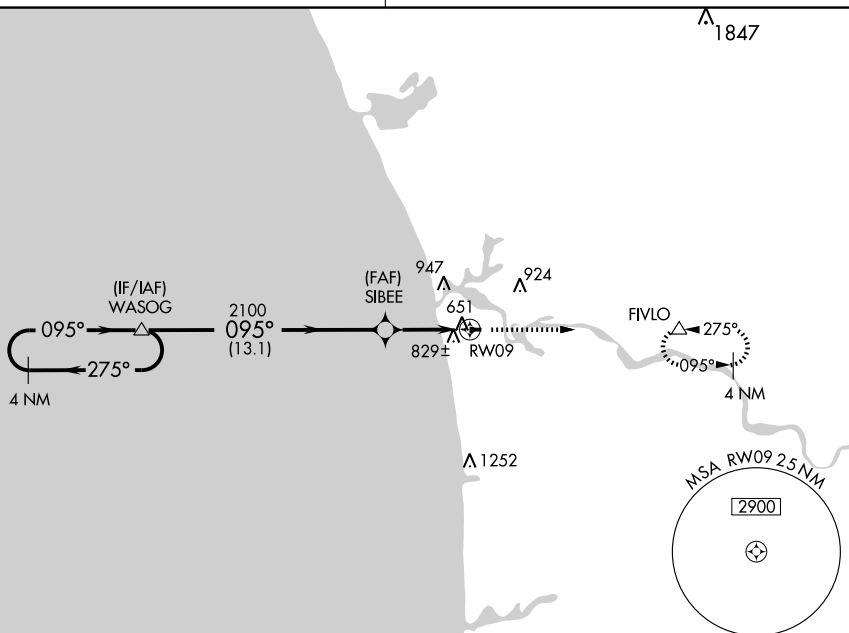
APP CRS  
**095°**Rwy Idg **3752**  
TDZE **602**  
Apt Elev **604**

RNAV (GPS) RWY 9

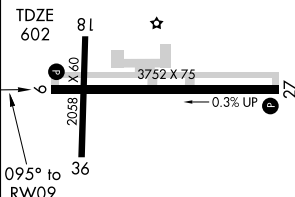
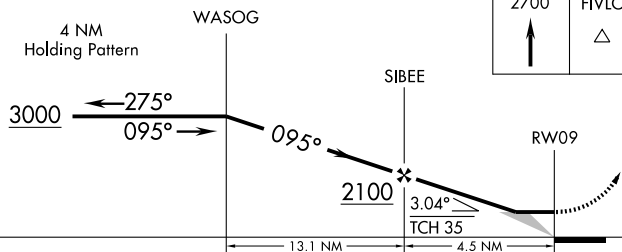
GRAND HAVEN MEMORIAL AIRPARK (3GM)

DME/DME RNP-0.3 NA.  
Use Muskegon altimeter setting.  
Circling NA at night to Rwy 18/36.

MISSED APPROACH: Climb to 2700 direct FIVLO and hold.

MUSKEGON APP CON ★  
**119.8 339.1**UNICOM  
**122.7** (CTAF) 

ELEV 604



CATEGORY	A	B	C	D
RNAV MDA	1120-1 518 (600-1)	1120-1 518 (600-1)	1120-1 518 (600-1)	NA
CIRCLING	1160-1 556 (600-1)	1180-1 576 (600-1)	1180-1 576 (600-1)	NA

REIL Rwy 9 and 27   
MIRL Rwy 9-27 and 18-36 GRAND HAVEN, MICHIGAN  
Orig 09351

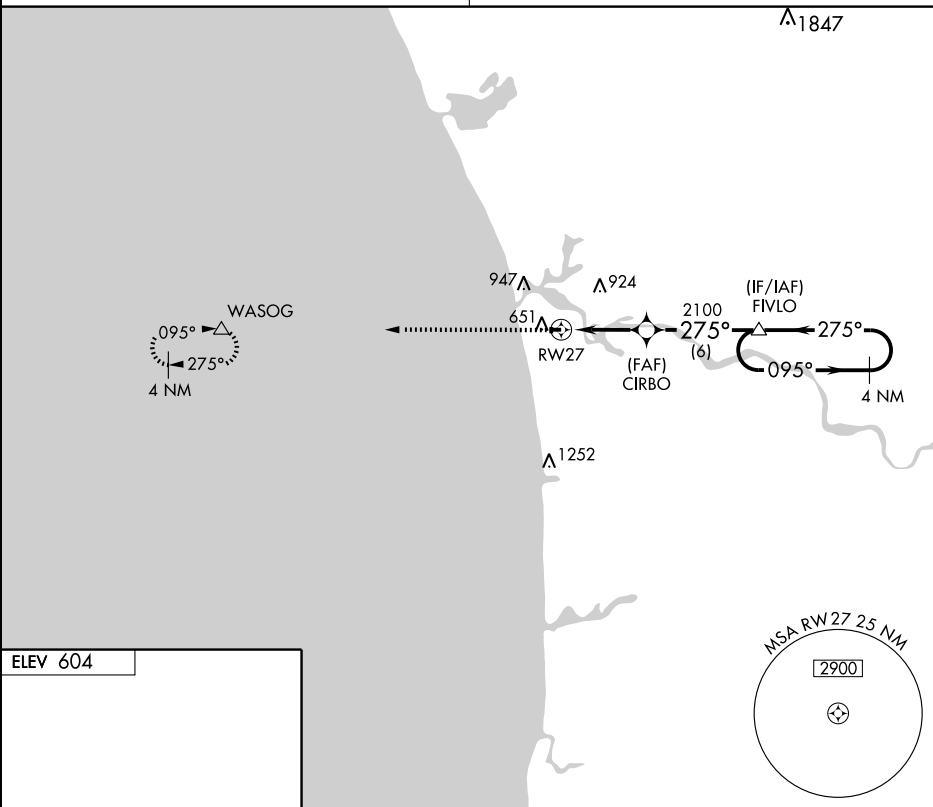
43°02'N - 86°12'W

GRAND HAVEN MEMORIAL AIRPARK (3GM)

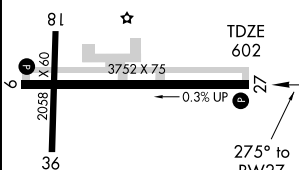
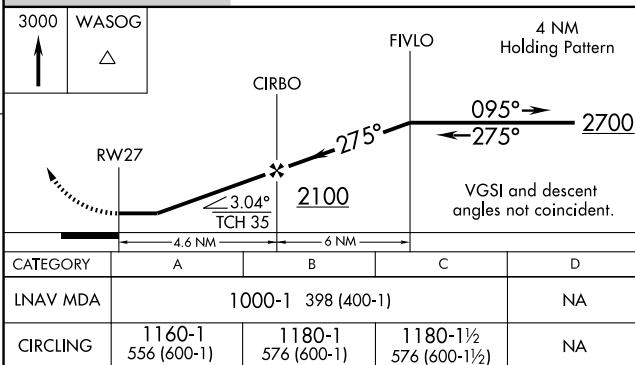
RNAV (GPS) RWY 9

APP CRS  
**275°**Rwy Idg **3752**  
TDZE **602**  
Apt Elev **604****RNAV(GPS) RWY 27**

GRAND HAVEN MEMORIAL AIRPARK (3GM)

DME/DME RNP-0.3 NA.  
Use Muskegon altimeter setting.  
Circling NA at night rwys 18/36.MISSED APPROACH: Climb to 3000 direct WASOG  
and hold.MUSKEGON APP CON ★  
**119.8 339.1**UNICOM  
**122.7 (CTAF) 0**

ELEV 604

REIL Rwys 9 and 27  
MIRL Rwys 9-27 and 18-36GRAND HAVEN, MICHIGAN  
Orig 09351GRAND HAVEN MEMORIAL AIRPARK (3GM)  
**RNAV(GPS) RWY 27**

43°02'N - 86°12'W

VORTAC MKG <b>115.2</b> Chan <b>99</b>	APP CRS <b>222°</b>	Rwy ldg TDZE Apt Elev	<b>N/A</b> <b>N/A</b> <b>604</b>
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VOR-A

GRAND HAVEN MEMORIAL AIRPARK (3GM)



NA

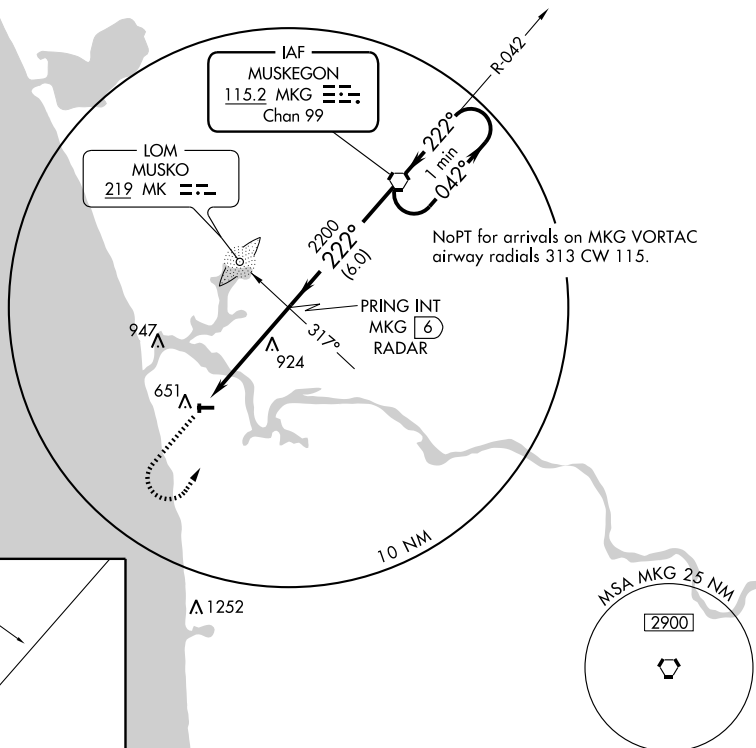
Use Muskegon altimeter setting.  
ADF, DME or RADAR REQUIRED

MISSED APPROACH: Climb to 2500 then  
left turn direct MKG VORTAC and hold.

MUSKEGON APP CON ★  
**119.8 339.1**

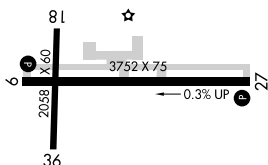
UNICOM  
**122.7 (CTAF) 0**

△ 1847




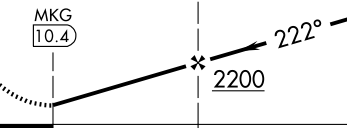


ELEV 604

222° 4.4 NM  
from FAF



REIL Rwy 9 and 27  
MIRL Rwy 9-27 and 18-36

2500			MKG  115.2	PRING INT MKG <span>6</span> RADAR	VORTAC	One Minute Holding Pattern
			MKG <span>10.4</span>		222°	042° → 2500 ← 222°
			4.4 NM	6 NM		
CATEGORY	A	B	C	D		
CIRCLING	1260-1	656 (700-1)	1260-1 3/4 656 (700-1 3/4)	NA		

GRAND HAVEN, MICHIGAN

Amdt 16 09351

GRAND HAVEN MEMORIAL AIRPARK (3GM)

43°02'N - 86°12'W

VOR-A

**GRAND LEDGE****ABRAMS MUNI**

(4D0) P (ARNG) 2 N UTC-5(-4DT) N42°46.45' W84°43.99'

**DETROIT**

842 B S4 FUEL 100LL TPA-See Remarks NOTAM FILE LAN

L-28J

RWY 09-27: H3200X75 (ASPH) MIRL 0.3% up E

IAP, DIAP

RWY 09: PAPI(P4L)—GA 3.0° TCH 25'. Tree.

RWY 27: REIL. PAPI(P2L)—GA 4.0° TCH 25'. Tree.

RWY 18-36: 2580X120 (TURF)

RWY 18: Thld dsplcd 400'. Trees.

RWY 36: Thld dsplcd 397'. Road.

MILITARY SERVICE: FUEL 100LL, J4, PPR, ctc OPS DSN 623-0671/2/3,  
C517-483-5671/2/3.

**AIRPORT REMARKS:** Attended 1300Z±-dusk. Rwy 18-36 CLOSED to fixed wing acft Nov-Apr, soft in spring. Intensive National Guard helicopter training on and in/ovf arpt. No fixed wing and limited rotary parking on national guard ramp. Rwy 18-36 and dsplcd thld marked with 3' yellow cones. Rwy 36 dsplcd thld marked with 3 yellow cones. Exit Rwy 18-36 only at twys. TPA-For helicopters 1700 (858) fixed wing TPA-1900(1058). ACTIVATE MIRL Rwy 09-27; REIL Rwy 27—CTAF.

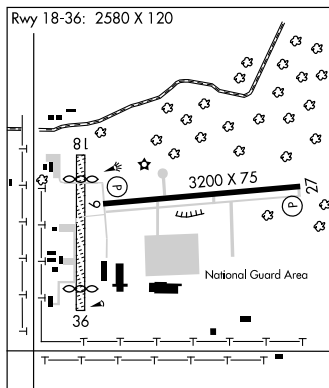
**MILITARY REMARKS: CAUTION** Avoid over flight of Grand Ledge blo 2000'.  
Night training conducted using night vision devices.

**COMMUNICATIONS: CTAF/UNICOM 122.7**

Ⓡ LANSING APP/DEP CON 118.65 226.4 ARNG OPS 41.85 122.7 241.0

**RADIO AIDS TO NAVIGATION:** NOTAM FILE LAN.

LANSING (L) VORTACW 110.8 LAN Chan 45 N42°43.04' W84°41.85' 340° 3.8 NM to fld. 887/5W.

**GRAND MARAIS**

(Y98) 3 SE UTC-5(-4DT) N46°37.25' W85°55.01'

**GREEN BAY**

838 NOTAM FILE GRB

RWY 14-32: 2800X100 (TURF)

RWY 14: Trees. RWY 32: Trees.

RWY 05-23: 2600X150 (TURF)

RWY 05: Trees. RWY 23: Trees.

**AIRPORT REMARKS:** Unattended. Arpt CLOSED Oct 15-May 15. Rwy not plowed winters. Rwy 05-23 marked with 3' yellow cones. Rwy 14-32 marked with 3' yellow cones. Rwy 05-23 and Rwy 14-32 surface rough.

**COMMUNICATIONS: CTAF/UNICOM 122.7****GRAND RAPIDS**

N42°47.20' W85°29.82'. NOTAM FILE GRR.

**CHICAGO**

(H) VOR/DME 115.95 GRR Chan 106(Y) 353° 5.8 NM to Gerald R Ford Intl. 803/4W.

H-5E, 10F, L-28I

DME unmonitored.

DME unusable byd 30 NM blo 3000'.

RCO 122.25 (LANSING RADIO)

LAN VORTAC <b>110.8</b> Chan <b>45</b>	APCH CRS <b>345°</b>	Rwy Idg TDZE Arpt Elev	<b>NA</b> <b>NA</b> <b>842</b>
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AL-6349 [USA]

GRAND LEDGE/ ABRAMS MUNI

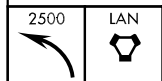
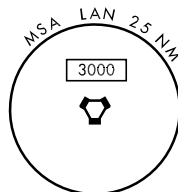
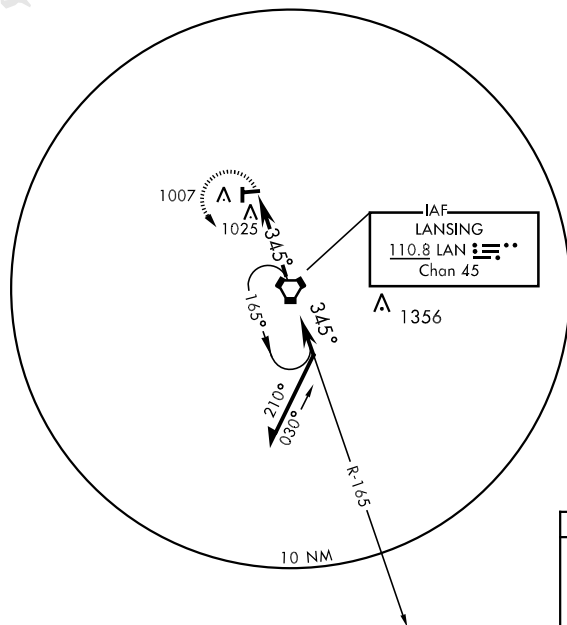
(4D0)

▲ NA Use Lansing altimeter setting.

MISSED APPROACH: Climbing left turn to 2500 direct LAN VORTAC and hold.

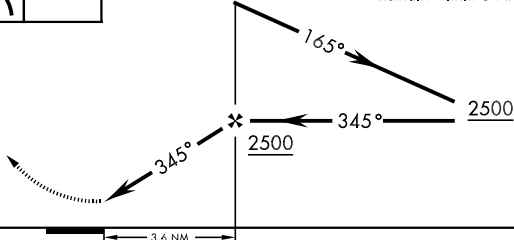
LANSING APP CON  
**118.65 226.4**

UNICOM (NG OPS)  
**122.7 0**

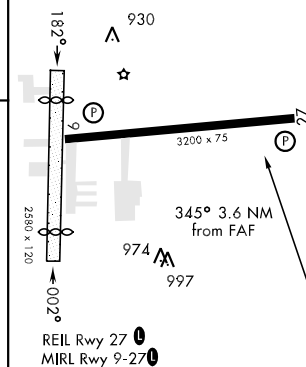


VORTAC

Remain within 5 NM



ELEV **842** Rwy 002° Idg 2183'  
Rwy 182° Idg 2180'



FAF to MAP 3.6 NM

Knots	45	60	75	90	105
Min:Sec	4:48	3:36	2:51	2:24	2:03

CATEGORY

COPTER

H-345° 1360-1/2 518 (600-1/2)

GRAND LEDGE, MICHIGAN

42° 47' N-84° 44' W

GRAND LEDGE/ ABRAMS MUNI

(4D0)

Amdt 6 08185

COPTER VOR 345°

VORTAC LAN <b>110.8</b> Chan <b>45</b>	APP CRS <b>345°</b>	Rwy ldg TDZE Apt Elev	<b>N/A</b> <b>N/A</b> <b>842</b>
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**VOR or GPS-A**

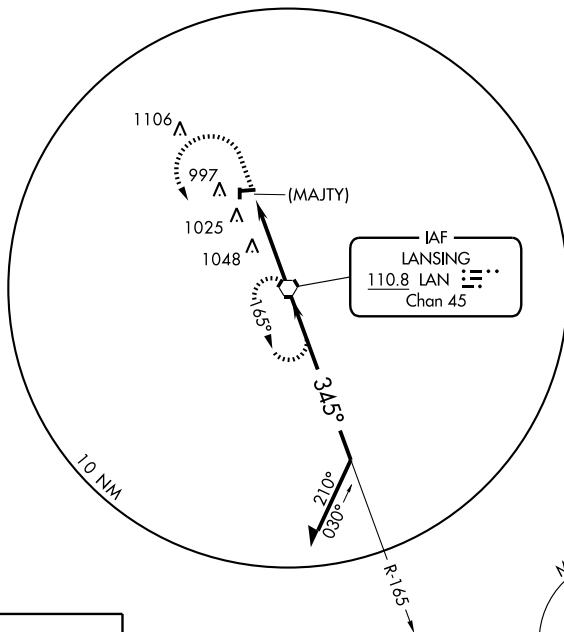
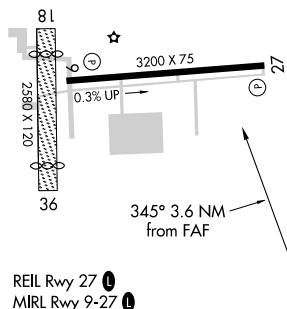
GRAND LEDGE / ABRAMS MUNI (4DØ)



NA

Use Lansing altimeter setting.

MISSED APPROACH: Climb to 2500, then turn left direct LAN VORTAC and hold.

LANSING APP CON  
**118.65 226.4**UNICOM  
**122.7 (CTAF) 0**ELEV **842**REIL Rwy 27 **0**  
MIRL Rwy 9-27 **0**(MAJTY)  
LAN **3.6**

VORTAC

Remain  
within 10 NM165°  
345°  
3000

2500

3.6 NM

FAF to MAP 3.6 NM					
Knots	60	90	120	150	180
Min:Sec	3:36	2:24	1:48	1:26	1:12

CATEGORY	A	B	C	D
CIRCLING	1400-1	558 (600-1)	1400-1½ 558 (600-1½)	NA

GRAND LEDGE, MICHIGAN  
Amdt 5 09295

42°46'N - 84°44'W

GRAND LEDGE / ABRAMS MUNI (4DØ)

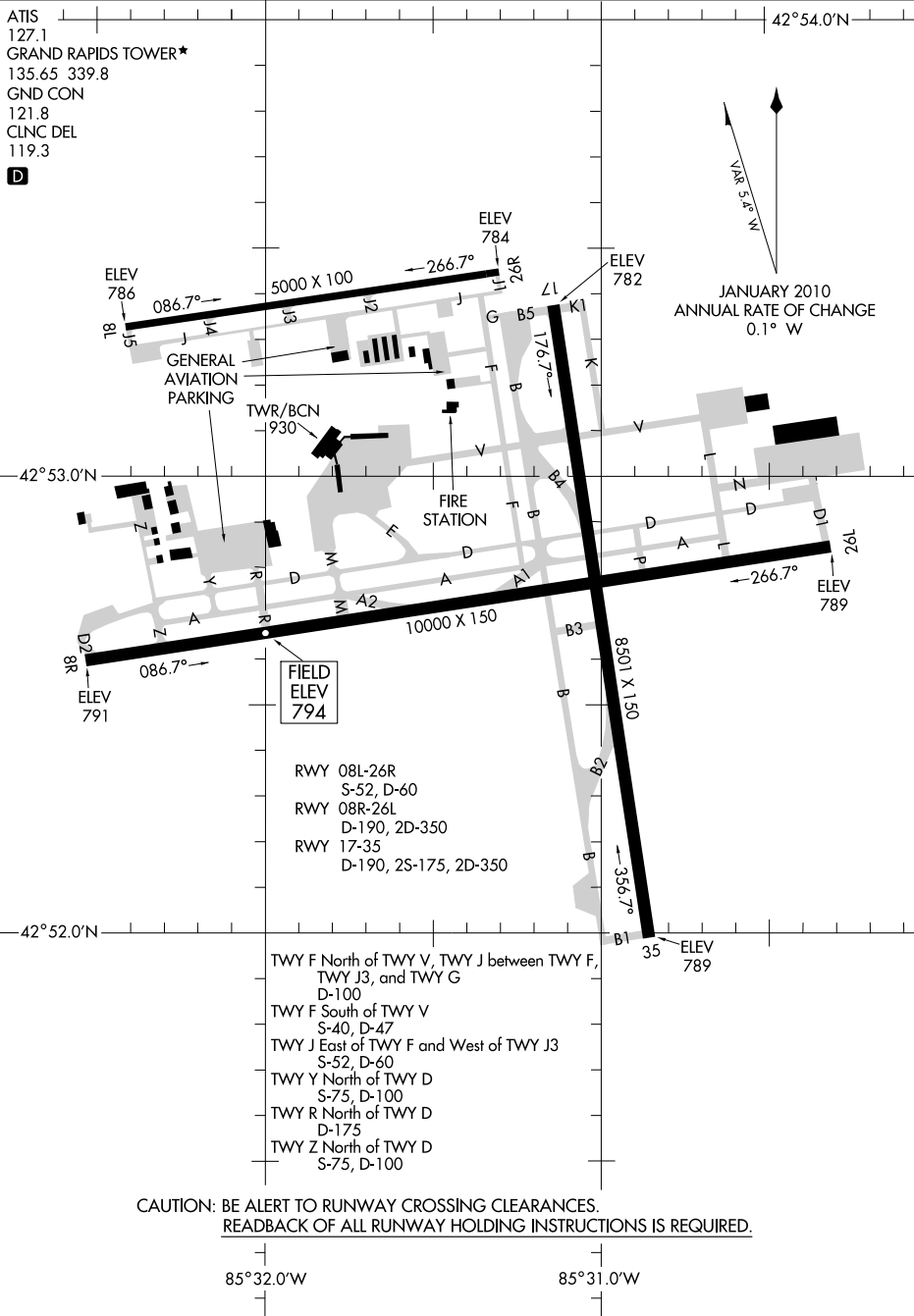
**VOR or GPS-A**

# AIRPORT DIAGRAM

AL-5184 (FAA)

GRAND RAPIDS / GERALD R. FORD INTL (GRR)

GRAND RAPIDS, MICHIGAN



EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010

# AIRPORT DIAGRAM

GRAND RAPIDS, MICHIGAN  
GRAND RAPIDS / GERALD R. FORD INTL (GRR)

10210

## GRAND RAPIDS

GERALD R FORD INTL (GRR) 6 SE UTC-5(-4DT) N42°52.85' W85°31.37'

CHICAGO

794 B S4 FUEL 100LL, JET A OX 1, 3 LRA Class I, ARFF Index C NOTAM FILE GRR H-5E, 10F, L-281

RWY 08R-26L: H10000X150 (CONC-GRVD) D-190, 2D-350 HIRL IAP, AD

RWY 08R: MALSR.

RWY 26L: MALSR. PAPI(P4L)—GA 3.0' TCH 73'.

RWY 17-35: H8501X150 (CONC-GRVD) D-190, 2S-175, 2D-350 HIRL

RWY 17: REIL. VASI(V4L)—GA 3.0' TCH 38'.

RWY 35: MALSR. PAPI(P4R)—GA 3.0' TCH 74'.

RWY 08L-26R: H5000X100 (CONC-GRVD) S-52, D-60 MIRL

RWY 08L: REIL. VASI(V4L)—GA 3.0' TCH 33'.

RWY 26R: REIL. VASI(V4L)—GA 3.0' TCH 33'.

## RUNWAY DECLARED DISTANCE INFORMATION

RWY 08L: TORA-5000 TODA-5000 ASDA-5000 LDA-5000

RWY 08R: TORA-10000 TODA-10000 ASDA-10000 LDA-10000

RWY 17: TORA-8501 TODA-8501 ASDA-8501 LDA-8501

RWY 26L: TORA-10000 TODA-10000 ASDA-10000 LDA-10000

RWY 26R: TORA-5000 TODA-5000 ASDA-5000 LDA-5000

RWY 35: TORA-8501 TODA-8501 ASDA-8501 LDA-8501

AIRPORT REMARKS: Attended continuously. PPR for acft with 171'

wingspan or larger. Birds on and in/ov arpt. Noise abatement procedures: Rwy 08R depart on rwy heading until reaching the highway E of arpt; Rwy 26L on apch to arpt turn final at highway E of arpt. Rwy 08L-26R for apch Cat C acft, wingspan must be less than 79'. Apch Cat D and E acft prohibited. Pushback advisories on the terminal ramp are not provided by ATC. When twr closed ACTIVATE HIRL Rwy 08R-26L; Rwy 17-35; MIRL Rwy 08L-26R; VASI Rwy 08L; Rwy 17 and Rwy 26R; PAPI Rwy 26L and Rwy 35; REIL Rwy 08L; Rwy 17 and Rwy 26R and MALSR Rwy 08R; 26L and 35—CTAF. Twy F north of Twy V, Twy J b/n Twy F and Twy J3 and Twy G clsd to acft over 100000 lbs; Twy F, south of Twy V and remaining sections of Twy J clsd to acft over 47000 lbs; Twy Y 400' north of Twy D clsd to acft over 100,000 lbs; Twy R north of Twy D clsd to acft over 175000 lbs. Twy R north of Twy D, Twy Y north of Twy D, Twy Z north of Twy D and Twy N are non-movement areas. Rwy 08R and 26L touchdown and rollout runway visual range avbl. Rwy 35 touchdown runway visual range avbl. Snow removal personnel will monitor CTAF when twr is clsd. LRA: Mon-Fri 2 hours PPR for customs call 616-942-5245, pager 616-249-5380. Call prior to 2100Z± on preceding Friday for after hours service.

WEATHER DATA SOURCES: ASOS (616) 956-3224. WSP.

COMMUNICATIONS: CTAF 135.65 ATIS 127.1 616-336-4755 UNICOM 122.95

GRAND RAPIDS RCO 122.25 (LANSING RADIO)

Ⓡ GRAND RAPIDS APP/DEP CON 124.6 (North) 128.4 (South) (1030-0500Z±)

Ⓡ CHICAGO CENTER APP/DEP CON 128.4 (0500-1030Z±)

GRAND RAPIDS TOWER 135.65 (1030-0500Z±) GND CON 121.8 CLNC DEL 119.3

AIRSPACE: CLASS C svc 1030-0500Z± etc APP CON other times CLASS E.

RADIO AIDS TO NAVIGATION: NOTAM FILE GRR.

GRAND RAPIDS (H) VOR/DME 115.95 GRR Chan 106(Y) N42°47.20' W85°29.82' 353° 5.8 NM to fld.  
803/4W. DME unmonitored.

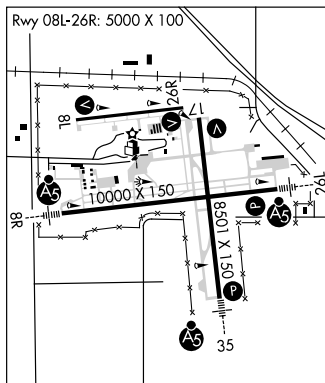
KNOBS NDB (LOM) 263 GR N42°53.74' W85°22.71' 266° 6.4 NM to fld.

ILS 109.7 I-GRR Rwy 26L. Class IB. LOM KNOBS NDB. LOC unusable 25° right of course.  
Unmonitored when twr clsd.

ILS 108.3 I-CYZ Rwy 08R. Unmonitored when twr clsd.

ILS 111.9 I-DVS Rwy 35. ILS unmonitored when twr clsd.

ASR (1030-0500Z±)



GRANT (Ø1C) 2 NE UTC-5(-4DT) N43°20.50' W85°46.50'

CHICAGO

815 NOTAM FILE LAN

RWY 09-27: 2517X120 (TURF) LIRL

RWY 09: Thld dsplcd 387'. Trees. RWY 27: Thld dsplcd 580'. Trees.

AIRPORT REMARKS: Attended irregularly. 100LL fuel avbl for emergencies only. Rwy 09-27 and dsplcd thlds marked with 3' yellow cones. Arpt lgts opr dusk-0500Z±. ACTIVATE LIRL Rwy 09-27—CTAF.

COMMUNICATIONS: CTAF/UNICOM 122.8



LOC I-CYZ <b>108.3</b>	APP CRS <b>085°</b>	Rwy Idg TDZE Apt Elev	<b>10000</b> <b>794</b> <b>794</b>
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## ILS or LOC RWY 8R

GRAND RAPIDS / GERALD R. FORD INTL (GRR)

**▼** \*RVR 1800 authorized with the use of FD or AP or HUD to DA.  
**▲** When local altimeter setting not received, use Holland altimeter setting and increase all DA 76 feet and all MDA 80 feet, increase S-LOC 8R Cat C visibility to RVR 5000, and Cat D to RVR 6000. For inoperative MALSR when using Holland altimeter setting, increase S-ILS 8R all Cats visibility to RVR 5000.

MALSR



MISSED APPROACH: Climb to 1300 then climbing right turn to 3000 direct GRR VOR/DME and hold.

ATIS

**127.1**

GRAND RAPIDS APP CON \*

**128.4 257.6**

GRAND RAPIDS TOWER \*

**135.65 (CTAF) 339.8**

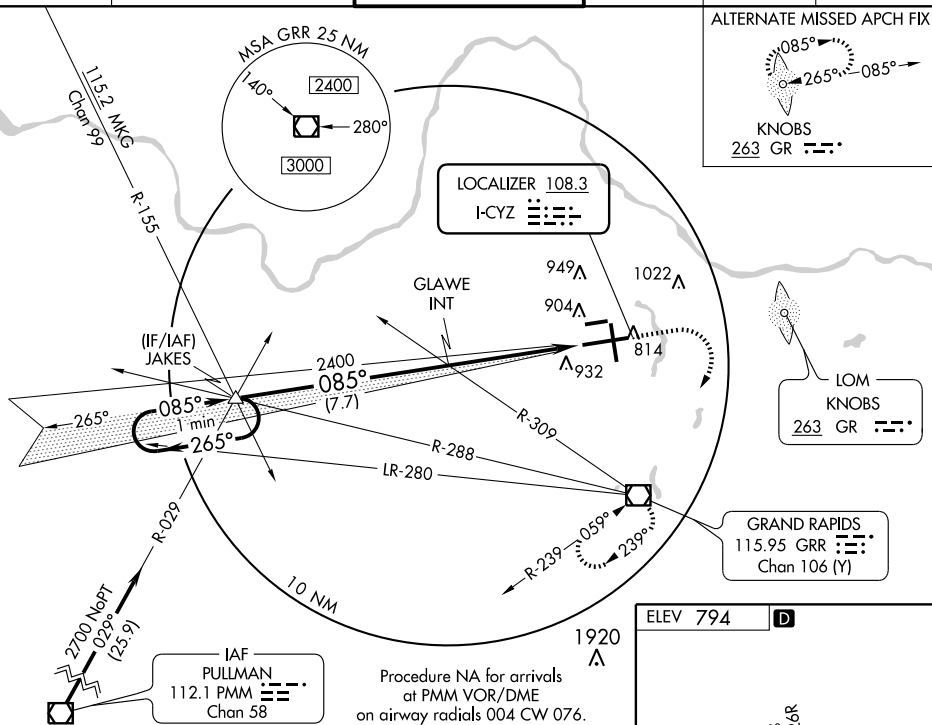
GND CON

**121.8**

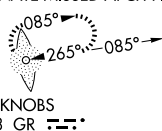
CLNC DEL

**119.3**

UNICOM

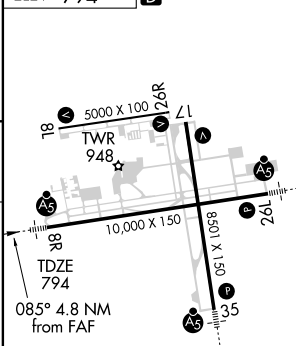
**122.95**

ALTERNATE MISSED APCH FIX



ELEV 794

D



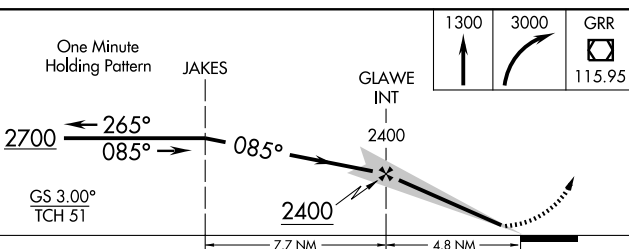
MIRL Rwy 8L-26R

REIL Rwy 8L, 26R and 17

HIRL Rwy 8R-26L and 17-35

FAF to MAP 4.8 NM

Knots	60	90	120	150	180
Min:Sec	4:48	3:12	2:24	1:55	1:36



CATEGORY	A	B	C	D
S-ILS 8R	*994/24 200 (200-½)			
S-LOC 8R	1240/24 446 (500-½)	1240/40 446 (500-¾)	1240/50 446 (500-1)	
CIRCLING	1280-1 486 (500-1)	1280-1½ 486 (500-½)	1360-2 566 (600-2)	

LOC I-GRR **109.7**  
APP CRS **265°**  
Rwy ldg **10000**  
TDZE **790**  
Apt Elev **794**

## ILS or LOC RWY 26L

GRAND RAPIDS / GERALD R. FORD INTL (GRR)

**V** When local altimeter setting not received, use Holland altimeter setting and increase all DA 76 feet and all MDA 80 feet, increase S-LOC 26L Cat C visibility to RVR 6000, Cat D to 1½ miles, Circling Cat C to 1¾ miles, GLGHR INT minimums S-LOC 26L Cat C to RVR 4000. For inoperative MALS R when using GLGHR INT minimums, increase S-LOC 26L Cat D visibility to RVR 5000. For inoperative MALS R when using Holland altimeter setting, increase S-ILS 26L all Cats visibility to RVR 5000.  
\*\*RVR 1800 authorized with the use of FD or AP or HUD to DA.

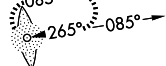
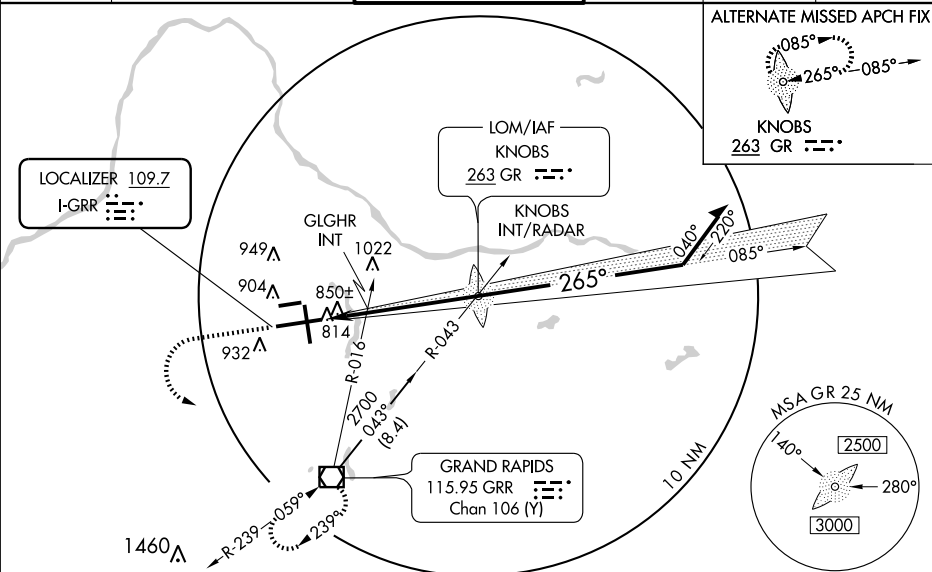
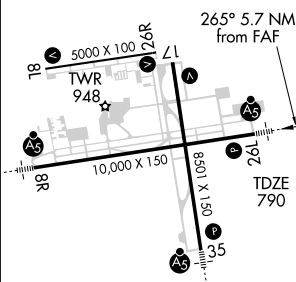
MALS R



**MISSED APPROACH:**  
Climb to 1300 then  
dimbing left turn to  
3000 direct  
GRR VOR/DME  
and hold.

ATIS **127.1** GRAND RAPIDS APP CON **128.4 257.6** GRAND RAPIDS TOWER **135.65 (CTAF) 0 339.8** GND CON **121.8** CLNC DEL **119.3** UNICOM **122.95**

ALTERNATE MISSED APCH FIX

KNOBS  
263 GRLOCALIZER **109.7**ELEV 794 **D**

MIRL Rwy 8L-26R **1**  
REIL Rws 8L, 26R and 17 **1**  
HIRL Rws 8R-26L and 17-35 **1**

FAF to MAP 5.7 NM

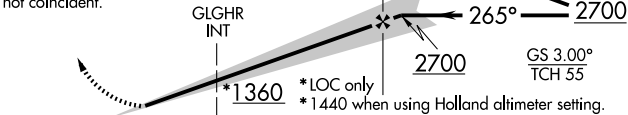
Knots	60	90	120	150	180
Min:Sec	5:42	3:48	2:51	2:17	1:54

GRAND RAPIDS, MICHIGAN

Amdt 21 10154

1300 3000 GRR  
115.95

VGSI and ILS glidepath  
not coincident.



CATEGORY	A	B	C	D
S-ILS 26L	** 990/24 200 (200-½)			
S-LOC 26L	1360/24	570 (600-½)	1360/50 570 (600-1)	1360/60 570 (600-1¼)
CIRCLING	1360-1	566 (600-1)	1360-1½ 566 (600-1½)	1360-2 566 (600-2)
GLGHR INT MINIMUMS				
S-LOC 26L	1120/24 330 (400-½)			1120/40 330 (400-¾)
CIRCLING	1280-1	486 (500-1)	1280-1½ 486 (500-1½)	1360-2 566 (600-2)

GRAND RAPIDS / GERALD R. FORD INTL (GRR)

42°53'N - 85°31'W

ILS or LOC RWY 26L

LOC I-DVS <b>111.9</b>	APP CRS <b>355°</b>	Rwy Ldg TDZE Apt Elev	<b>8501</b> <b>790</b> <b>794</b>
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## ILS or LOC RWY 35

GRAND RAPIDS / GERALD R. FORD INTL (GRR)

**⚠** When local altimeter setting not received, use Holland altimeter setting and increase all DA 76 feet and all MDA 80 feet. Increase S-LOC 35 Cat B visibility to RVR 4000 and Cat C/D visibility ¼ mile. Increase Cat B/C/D Circling visibility ¼ mile.

**ASR** LMBAW INT MINIMUMS: Increase S-LOC 35 Cat C visibility to RVR 4000 and Cat D to RVR 5000. For inoperative MALSR when using Holland altimeter setting, increase S-ILS 35 all Cats visibility to RVR 5000.

**\*\*RVR 1800 authorized with the use of FD or AP or HUD to DA.**

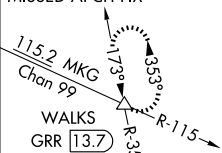
MALSR



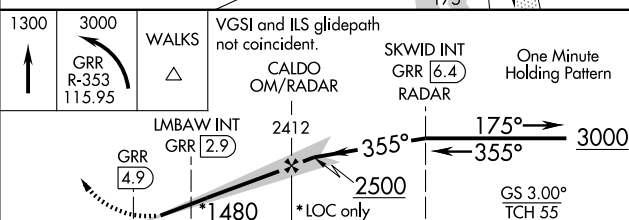
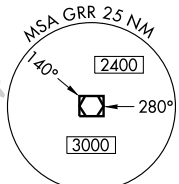
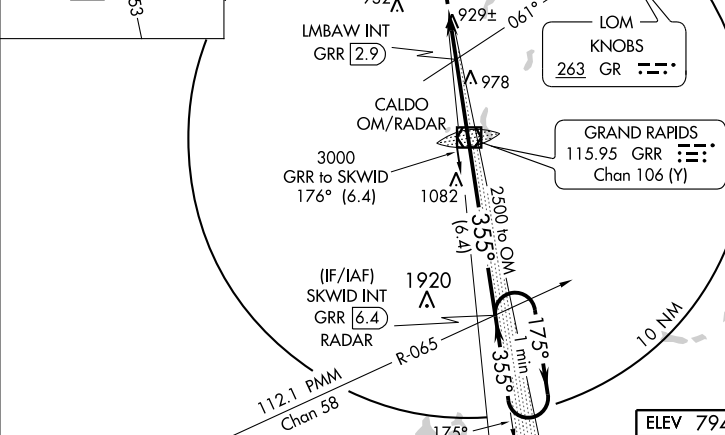
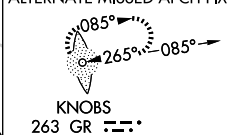
**MISSED APPROACH:** Climb to 1300 then climbing left turn to 3000 via GRR VOR/DME R-353 to WALKS INT/GRR 13.7 DME and hold.

ATIS <b>127.1</b>	GRAND RAPIDS APP CON ★ <b>128.4 257.6</b>	GRAND RAPIDS TOWER ★ <b>135.65 (CTAF) 0 339.8</b>	GND CON <b>121.8</b>	CLNC DEL <b>119.3</b>	UNICOM <b>122.95</b>
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MISSED APCH FIX



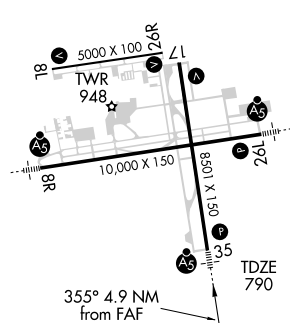
ALTERNATE MISSED APCH FIX



ELEV 794

D

MIRL Rwy 8L-26R **Ⓛ**  
REIL Rwy 8L, 26R and 17 **Ⓛ**  
HIRL Rwy 8R-26L and 17-35 **Ⓛ**



CATEGORY	A	B	C	D
S-ILS 35	** 990/24 200 (200-½)			
S-LOC 35	1480/24	690 (700-½)	1480-1½ 690 (700-1½)	1480-1¾ 690 (700-1¾)
CIRCLING	1480-1	686 (700-1)	1480-2 686 (700-2)	1480-2¼ 686 (700-2¼)
LMBAW FIX MINIMUMS				
S-LOC 35	1180/24	390 (400-½)	1180/40 390 (400-¾)	
CIRCLING	1260-1	466 (500-1)	1260-1½ 466 (500-1½)	1360-2 566 (600-2)

FAF to MAP 4.9 NM					
Knots	60	90	120	150	180
Min:Sec	4:54	3:16	2:27	1:58	1:38

GRAND RAPIDS, MICHIGAN

Amdt 1 10154

GRAND RAPIDS / GERALD R. FORD INTL (GRR)

42°53'N - 85°31'W

## ILS or LOC RWY 35

WAAS CH <b>40213</b> <b>W08A</b>	APP CRS <b>085°</b>	Rwy Idg TDZE Apt Elev	<b>5000</b> <b>787</b> <b>794</b>
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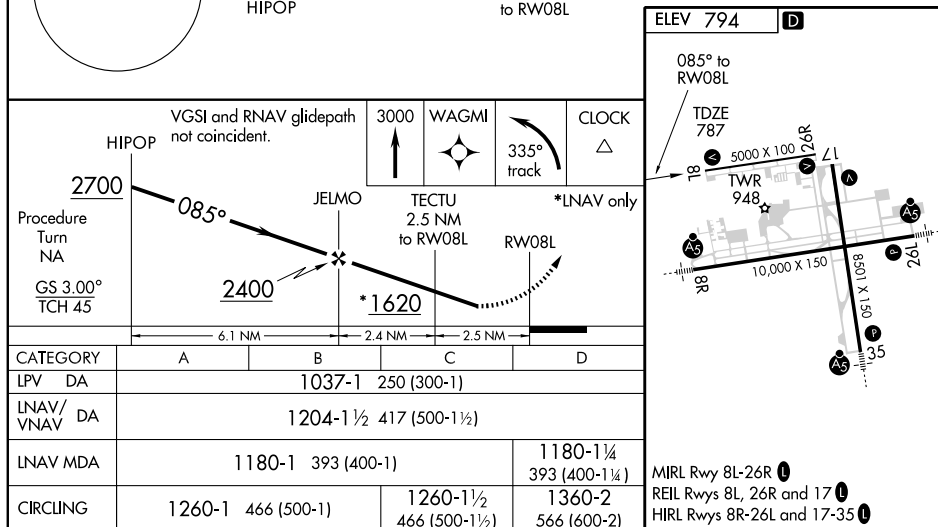
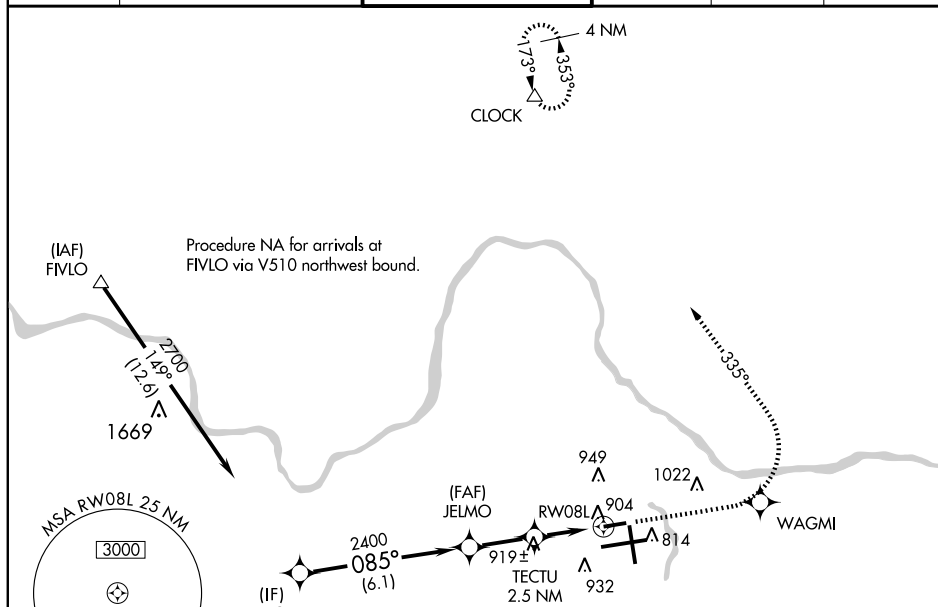
## RNAV (GPS) RWY 8L

GRAND RAPIDS / GERALD R. FORD INTL (GRR)

**⚠** Baro-VNAV NA when using Holland altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA.  
**⚠** Visibility reduction by helicopters NA. When local altimeter setting not received, use Holland altimeter setting and increase all DA 76 feet and all MDA 80 feet. Increase LPV and LNAV/VNAV visibility ¼ mile all Cats. Increase LNAV Cat C/D visibility ¼ mile.

**MISSED APPROACH:** Climb to 3000 direct WAGMI and left turn via track 335° to CLOCK and hold.

ATIS <b>127.1</b>	GRAND RAPIDS APP CON * <b>128.4 257.6</b>	GRAND RAPIDS TOWER * <b>135.65 (CTAF) 0 339.8</b>	GND CON <b>121.8</b>	CLNC DEL <b>119.3</b>	UNICOM <b>122.95</b>
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WAAS CH <b>40113</b> <b>W08B</b>	APP CRS <b>085°</b>	Rwy Idg <b>10000</b> TDZE <b>794</b> Apt Elev <b>794</b>
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## RNAV (GPS) RWY 8R

GRAND RAPIDS / GERALD R. FORD INTL (GRR)

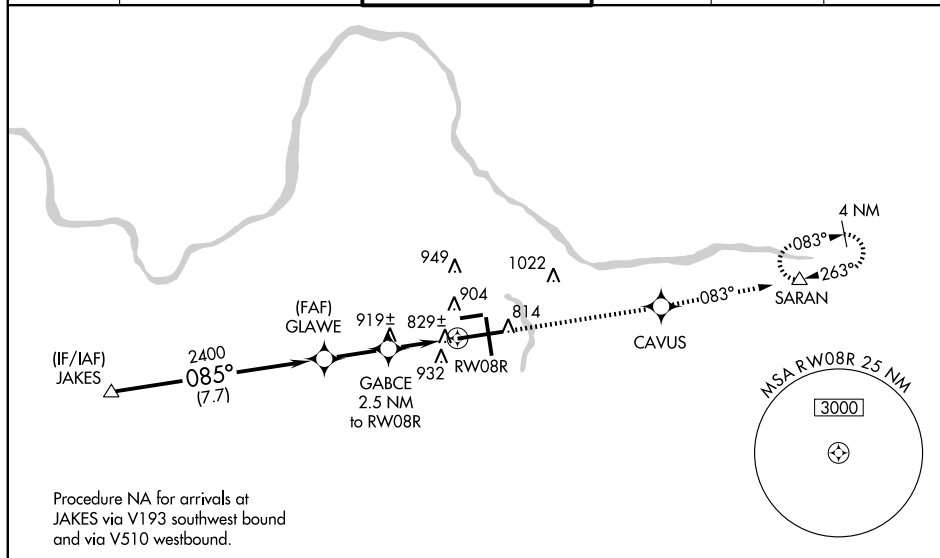
**▼** For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. VDP and Baro-VNAV NA when using Holland altimeter setting. When local altimeter setting not received, use Holland altimeter setting and increase all DA 76 feet and all MDA 80 feet, LNAV/VNAV all Cats visibility to RVR 6000, LNAV Cat C to RVR 4000. For inoperative MALSR, increase LNAV Cat D visibility to RVR 6000. For inoperative MALSR when using Holland altimeter setting, increase LPV all Cats visibility to RVR 5000.

MALSR



MISSED APPROACH: Climb to 2700 direct CAVUS and via track 083° to SARAN and hold.

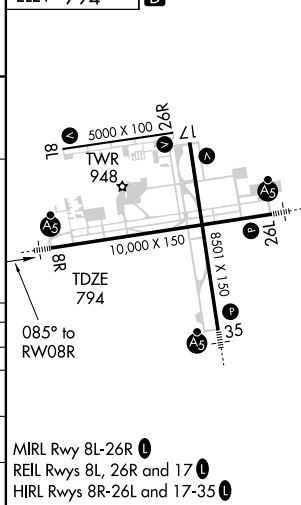
ATIS <b>127.1</b>	GRAND RAPIDS APP CON * <b>128.4 257.6</b>	GRAND RAPIDS TOWER * <b>135.65 (CTAF) 0 339.8</b>	GND CON <b>121.8</b>	CLNC DEL <b>119.3</b>	UNICOM <b>122.95</b>
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JAKES		GLAWE		CAVUS	TRK 083°	SARAN
2700		2400		1920		
Procedure Turn NA		*1640		GABCE 2.5 NM to RW08R	*1.1 NM to RW08R	*LNAV only
GS 3.00° TCH 51		7.7 NM		2.3 NM	1.4 NM	1.1 NM
CATEGORY	A	B	C	D		
LPV DA	994/24		200 (200-½)			
LNAV/VNAV DA	1213/50		419 (500-1)			
LNAV MDA	1180/24		386 (400-½)		1180/50 386 (400-1)	
CIRCLING	1260-1 466 (500-1)		1260-1½ 466 (500-1½)		1360-2 566 (600-2)	

ELEV 794

D



WAAS CH <b>93912</b> <b>W17A</b>	APP CRS <b>175°</b>	Rwy Idg TDZE Apt Elev	<b>8501</b> <b>789</b> <b>794</b>
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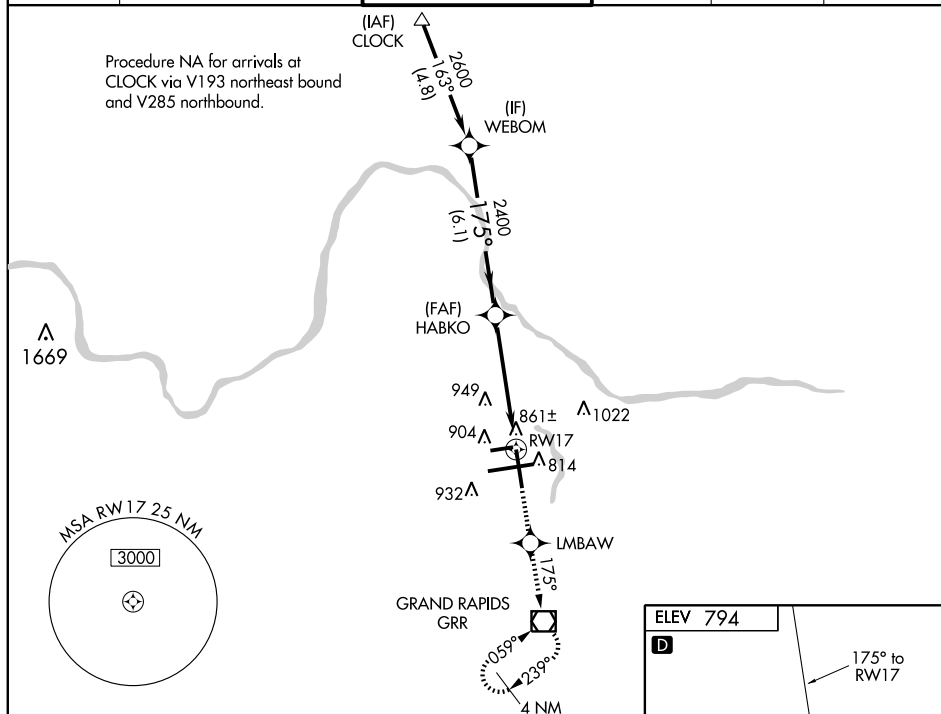
## RNAV (GPS) RWY 17

GRAND RAPIDS / GERALD R. FORD INTL (GRR)

**▼** For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. Visibility reduction by Helicopters NA. When local altimeter ASR setting not received, use Holland altimeter setting and increase all DA 76 feet and all MDA 80 feet. Increase LPV visibility ½ mile all Cats and LNAV/VNAV visibility ¼ mile all Cats. Increase LNAV Cat D visibility ¼ mile. Baro-VNAV and VDP NA when using Holland altimeter setting.

**MISSED APPROACH:** Climb to 3000 direct LMBAW and via track 175° to GRR VOR/DME and hold, continue climb-in-hold to 3000.

ATIS <b>127.1</b>	GRAND RAPIDS APP CON ★ <b>128.4 257.6</b>	GRAND RAPIDS TOWER ★ <b>135.65 (CTAF) 0 339.8</b>	GND CON <b>121.8</b>	CLNC DEL <b>119.3</b>	UNICOM <b>122.95</b>
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	WEBOM	VGSi and RNAV glidepath not coincident.	3000	LMBAW	175° track	GRR
Procedure Turn NA	2600					
GS 3.00° TCH 50						
CATEGORY	A	B	C	D		
LPV DA	1108-1	319 (400-1)				
LNAV/VNAV DA	1259-1¾	470 (500-1¾)				
LNAV MDA	1200-1 411 (500-1)	1260-1½ 466 (500-1½)	1360-2 566 (600-2)			
CIRCLING	1260-1 466 (500-1)					

MIRL Rwy 8L-26R **1**  
REIL Rwy 8L, 26R and 17 **1**  
HRL Rwy 8R-26L and 17-35 **1**

WAAS CH <b>86713</b> <b>W26B</b>	APP CRS <b>265°</b>	Rwy Idg TDZE Apt Elev	<b>10000</b> <b>790</b> <b>794</b>
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## RNAV (GPS) RWY 26L

GRAND RAPIDS / GERALD R. FORD INTL (GRR)

**ASR** For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. VDP and Baro-VNAV NA when using Holland altimeter setting. When local altimeter setting not received, use Holland altimeter setting and increase all DA 76 feet and all MDA 80 feet, LNAV/VNAV Cats A/B/C visibility to RVR 4000, LNAV Cat C to RVR 5000, Cat D to RVR 6000. For inoperative MALSR, increase LNAV/VNAV Cat D visibility to RVR 5000. For inoperative MALSR when using Holland altimeter setting, increase LPV all Cats visibility to RVR 5000.

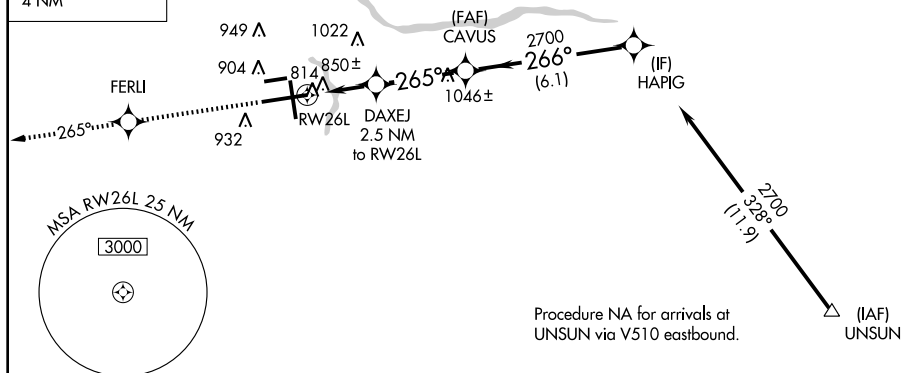
MALSR



MISSED APPROACH: Climb to 2700 direct FERLI and via 265° track to JAKES and hold.

ATIS <b>127.1</b>	GRAND RAPIDS APP CON ★ <b>128.4 257.6</b>	GRAND RAPIDS TOWER ★ <b>135.65 (CTAF) 339.8</b>	GND CON <b>121.8</b>	CLNC DEL <b>119.3</b>	UNICOM <b>122.95</b>
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MISSED APCH FIX



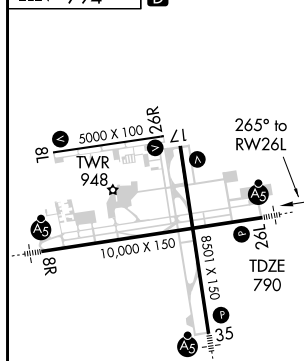
Procedure NA for arrivals at UNSUN via V510 eastbound.

(IAF) UNSUN

1953 A

ELEV 794

D



MIRL Rwy 8L-26R (1)  
REIL Rws 8L, 26R and 17 (1)  
HIRL Rws 8R-26L and 17-35 (1)

2700 ↑	FERLI ✱	TRK 265°	JAKES △	VGSI and RNAV glidepath not coincident.			Procedure Turn NA
*LNAV only				DAXEJ 2.5 NM to RW26L	CAVUS	HAPIG	

GRAND RAPIDS, MICHIGAN

Amdt 1 10154

GRAND RAPIDS / GERALD R. FORD INTL (GRR)

42°53'N - 85°31'W

RNAV (GPS) RWY 26L

WAAS CH <b>82413</b> <b>W26A</b>	APP CRS <b>265°</b>	Rwy Idg <b>5000</b> TDZE <b>787</b> Apt Elev <b>794</b>
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## RNAV (GPS) RWY 26R

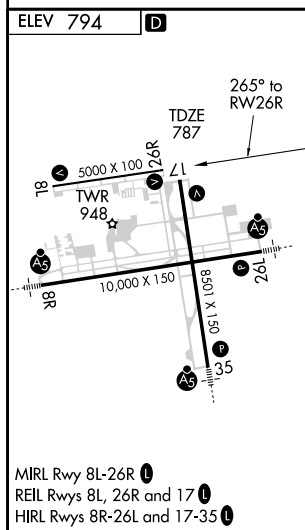
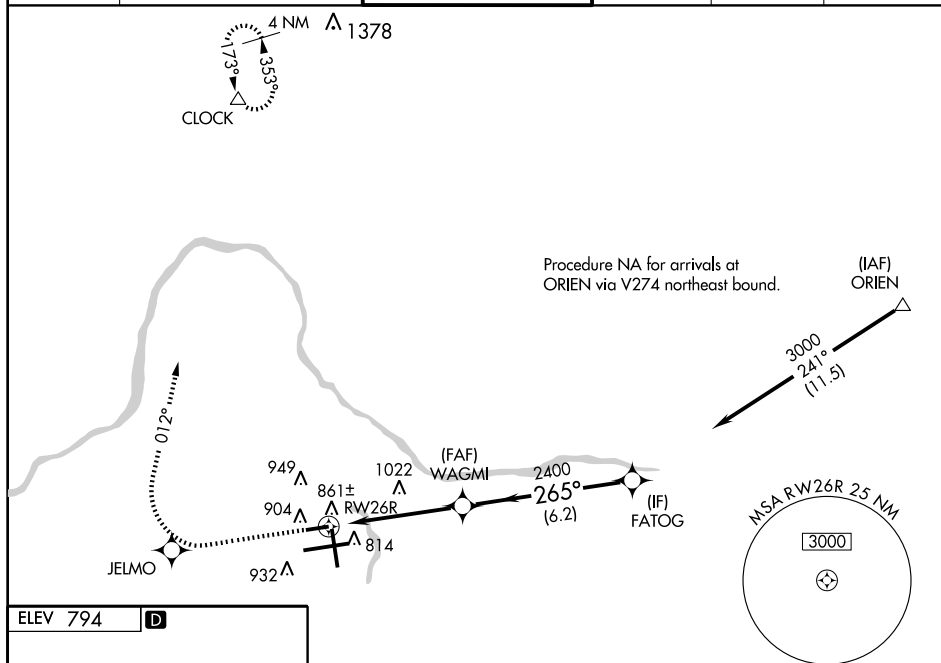
GRAND RAPIDS / GERALD R. FORD INTL (GRR)

**⚠** Baro-VNAV NA when using Holland altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA.

**ASR** Visibility reduction by helicopters NA. When local altimeter setting not received, use Holland altimeter setting and increase all DA 76 feet and all MDA 80 feet. Increase LPV and LNAV/VNAV visibility ¼ mile all Cats. Increase LNAV Cat C/D ¼ mile.

**MISSED APPROACH:** Climb to 3000 direct JELMO and right turn via track 012° to CLOCK and hold.

ATIS 127.1	GRAND RAPIDS APP CON ★ 128.4 257.6	GRAND RAPIDS TOWER ★ 135.65 (CTAF) 0 339.8	GND CON 121.8	CLNC DEL 119.3	UNICOM 122.95
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3000  
JELMO  
012° track  
CLOCK △

VLSI and RNAV glidepath not coincident.

Procedure Turn NA

3000

265°

2400

WAGMI

RW26R

4.9 NM

6.2 NM

FATOG

GS 3.00°  
TCH 50

CATEGORY	A	B	C	D
LPV DA	1037-1 250 (300-1)			
INAV/VNAV DA	1216-1½ 429 (500-1½)			
INAV MDA	1280-1	493 (500-1)	1280-1¼ 493 (500-1¼)	1280-1½ 493 (500-1½)
CIRCLING	1280-1	486 (500-1)	1280-1½ 486 (500-1½)	1360-2 566 (600-2)

GRAND RAPIDS, MICHIGAN

Amdt 1 10154

GRAND RAPIDS / GERALD R. FORD INTL (GRR)

42°53'N - 85°31'W

## RNAV (GPS) RWY 26R

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1. 23 SEP 2010 to 21 OCT 2010



WAAS CH <b>87112</b> <b>W35A</b>	APP CRS <b>355°</b>	Rwy Idg TDZE Apt Elev	<b>8501</b> <b>790</b> <b>794</b>
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## RNAV (GPS) RWY 35

GRAND RAPIDS / GERALD R. FORD INTL (GRR)

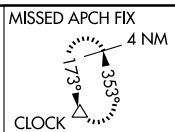
**▼** For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Holland altimeter setting and increase all DA 76 feet and all MDA 80 feet. Increase LNAV/VNAV visibility to RVR 6000 all Cats and LNAV Cat C visibility to RVR 4000. For inoperative MALSR, increase LNAV Cat D visibility to RVR 6000. For inoperative MALSR when using Holland altimeter setting increase LPV all Cats visibility to RVR 5000. Baro-VNAV and VDP NA when using Holland altimeter setting.

MALSR



**MISSED APPROACH:**  
Climb to 3000 direct  
HABKO and via track  
350° to CLOCK and  
hold.

ATIS <b>127.1</b>	GRAND RAPIDS APP CON ★ <b>128.4 257.6</b>	GRAND RAPIDS TOWER ★ <b>135.65 (CTAF) 0 339.8</b>	GND CON <b>121.8</b>	CLNC DEL <b>119.3</b>	UNICOM <b>122.95</b>
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△ CLOCK

HABKO

949

904

932

929±

990

(FAF) FALSU

355

(6.1)

2500

(IF) SKWID

3000

(5.9)

1956

(IAF) BOHRR

3000

HABKO

TRK 350°

CLOCK

VGS and RNAV glidepath not coincident.

SKWID

3000

Procedure Turn NA

GS 3.00°

TCH 55°

\*LNAV only

LMBAW 2 NM to RW35

\*1 NM to RW35

RW35

\*1480

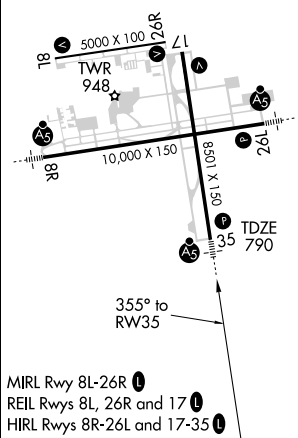
2500

1 NM 1 NM 3.1 NM 6.1 NM

CATEGORY	A	B	C	D
LPV DA	990/24 200 (200-½)			
LNAV/VNAV DA	1236/50 446 (500-1)			
LNAV MDA	1180/24 390 (400-½)			1180/50 390 (400-1)
CIRCLING	1260-1 466 (500-1)		1260-1½ 466 (500-1½)	1360-2 566 (600-2)

ELEV 794

D



MIRL Rwy 8L-26R

REIL Rws 8L, 26R and 17

HIRL Rws 8R-26L and 17-35

GRAND RAPIDS, MICHIGAN

Amdt 1 10154

GRAND RAPIDS / GERALD R. FORD INTL (GRR)

42°53'N - 85°31'W

RNAV (GPS) RWY 35

VOR/DME GRR	APP CRS	Rwy Idg	8501
Chan <b>115.95</b>	<b>175°</b>	TDZE	789
106 (Y)		Apt Elev	794

**VOR RWY 17**

GRAND RAPIDS / GERALD R. FORD INTL (GRR)



ASR

MISSED APPROACH: Climb to 3000 direct GRR VOR/DME and hold.

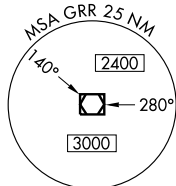
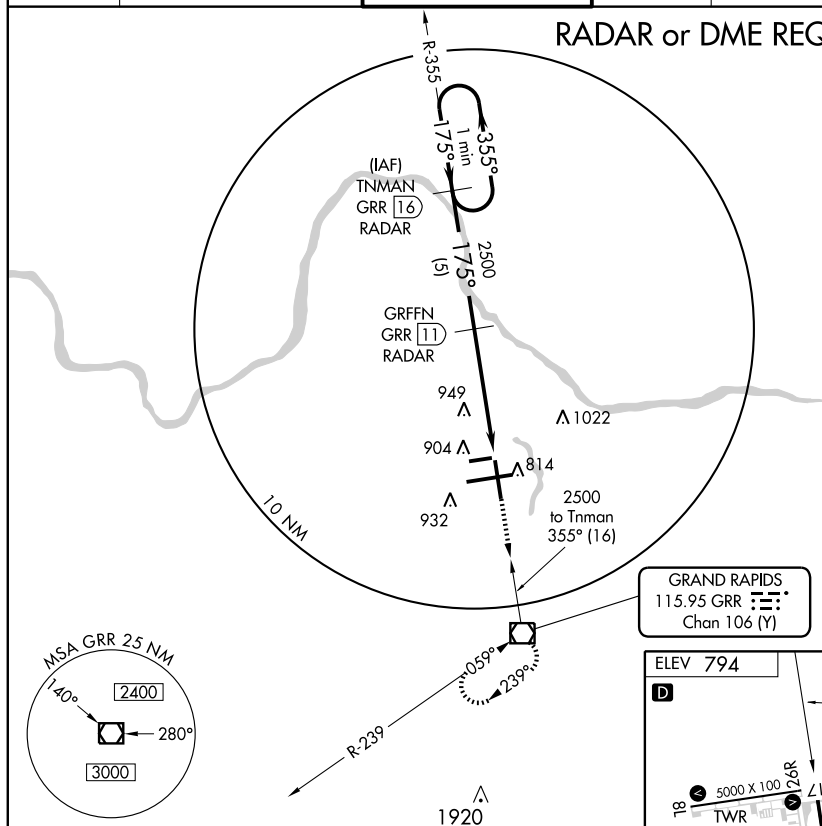
 ATIS  
**127.1**

 GRAND RAPIDS APP CON ★  
**128.4 257.6**

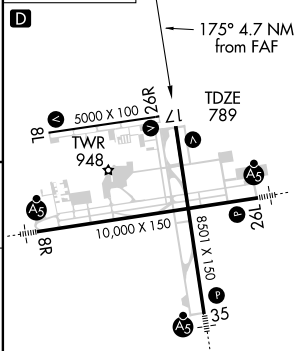
 GRAND RAPIDS TOWER ★  
**135.65 (CTAF) 0 339.8**

 GND CON  
**121.8**

 CLNC DEL  
**119.3**

 UNICOM  
**122.95**
**RADAR or DME REQUIRED**
 GRAND RAPIDS  
 115.95 GRR  
 Chan 106 (Y)

ELEV 794



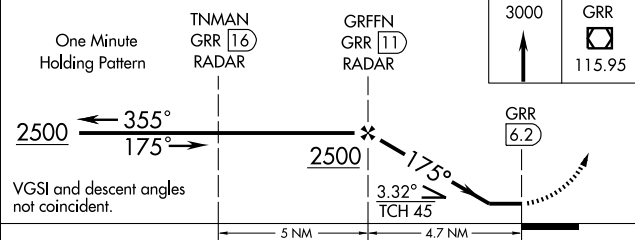
MIRL Rwy 8L-26R

REIL Rwy 8L, 26R and 17

HIRL Rwy 8R-26L and 17-35

FAF to MAP 4.7 NM

Knots	60	90	120	150	180
Min:Sec	4:42	3:08	2:21	1:53	1:34



CATEGORY	A	B	C	D
S-17	1200-1	411 (500-1)	1200-1½	411 (500-1½)
CIRCLING	1280-1	486 (500-1)	1280-1½	1360-2
			486 (500-1½)	566 (600-2)

GRAND RAPIDS, MICHIGAN

Orig-C 10154

GRAND RAPIDS / GERALD R. FORD INTL (GRR)

42°53'N - 85°31'W

**VOR RWY 17**

VOR/DME GRR <b>115.95</b> Chan <b>106</b> (Y)	APP CRS <b>355°</b>	Rwy Idg TDZE Apt Elev	<b>8501</b> <b>790</b> <b>794</b>
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VOR RWY 35

GRAND RAPIDS / GERALD R. FORD INTL (GRR)

**T** When local altimeter setting not received, use Holland altimeter setting and increase all MDA 80 feet, S-35 Cat C visibility to RVR 5000, Cat D to RVR 6000, ALSKA INT minimums S-35 Cat C to RVR 4000.

**A** For inoperative MALS/R, increase ALSKA INT minimums S-35 Cat D visibility to RVR 6000.

**ASR**

MALSR



**MISSED APPROACH:** Climb to 3000 via GRR VOR/DME R-353 to WALKS INT/GRR 13.7 DME and hold.

ATIS  
127.1

GRAND RAPIDS APP CON ★  
128.4 257.6

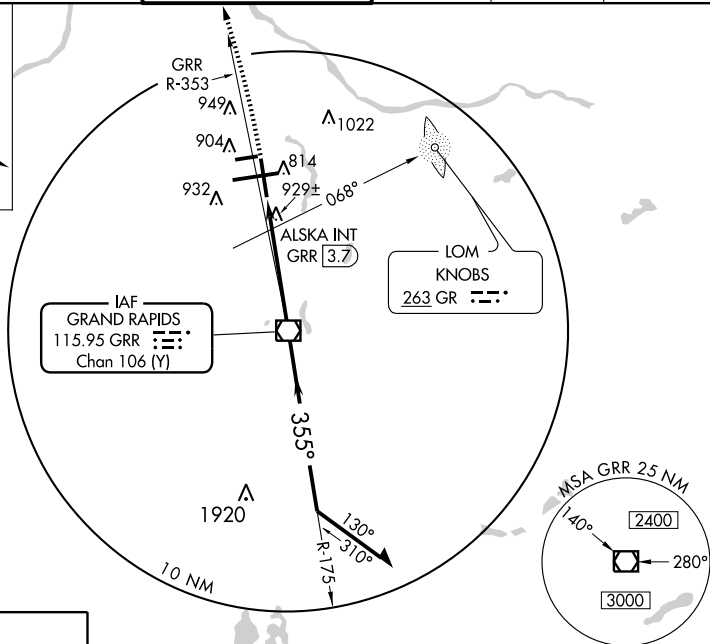
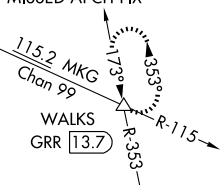
GRAND RAPIDS TOWER ★  
135.65 (CTAF) **L** 339.8

GND CO  
121.8

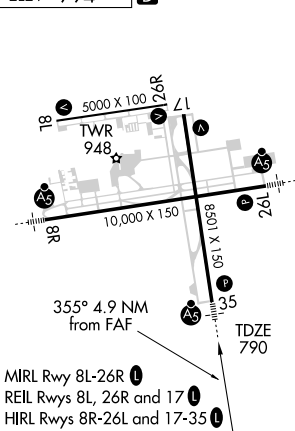
CLNC DE  
**119.3**

UNICOM  
122.95

MISSED APCH FIX



ELEV 794	D
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FAF to MAP 4.9 NM

Knots	60	90	120	150	180
Min:Sec	4:54	3:16	2:27	1:58	1:38

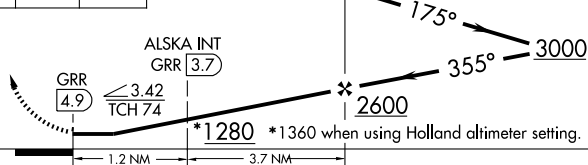
3000  
↑

GRR  
R-353  
115.95

WALK  
△

VGSI and descent angles  
not coincident.

Remain  
within 10 NM



CATEGORY	A	B	C	D
S-35	1280/24	490 (500-½)	1280/40 490 (500-¾)	1280/50 490 (500-1)
CIRCLING	1280-1	486 (500-1)	1280-1½ 486 (500-1½)	1360-2 566 (600-2)

ALSKA INT MINIMUMS

S-35	1180/24 390 (400-½)	1180/50 390 (400-1)
CIRCLING	1280-1 486 (500-1)	1280-1½ 486 (500-1½) 1360-2 566 (600-2)

GRAND RAPIDS, MICHIGAN

Amdt 1 10154

GRAND RAPIDS / GERALD R. FORD INTL (GRR)

42°53'N - 85°31'W

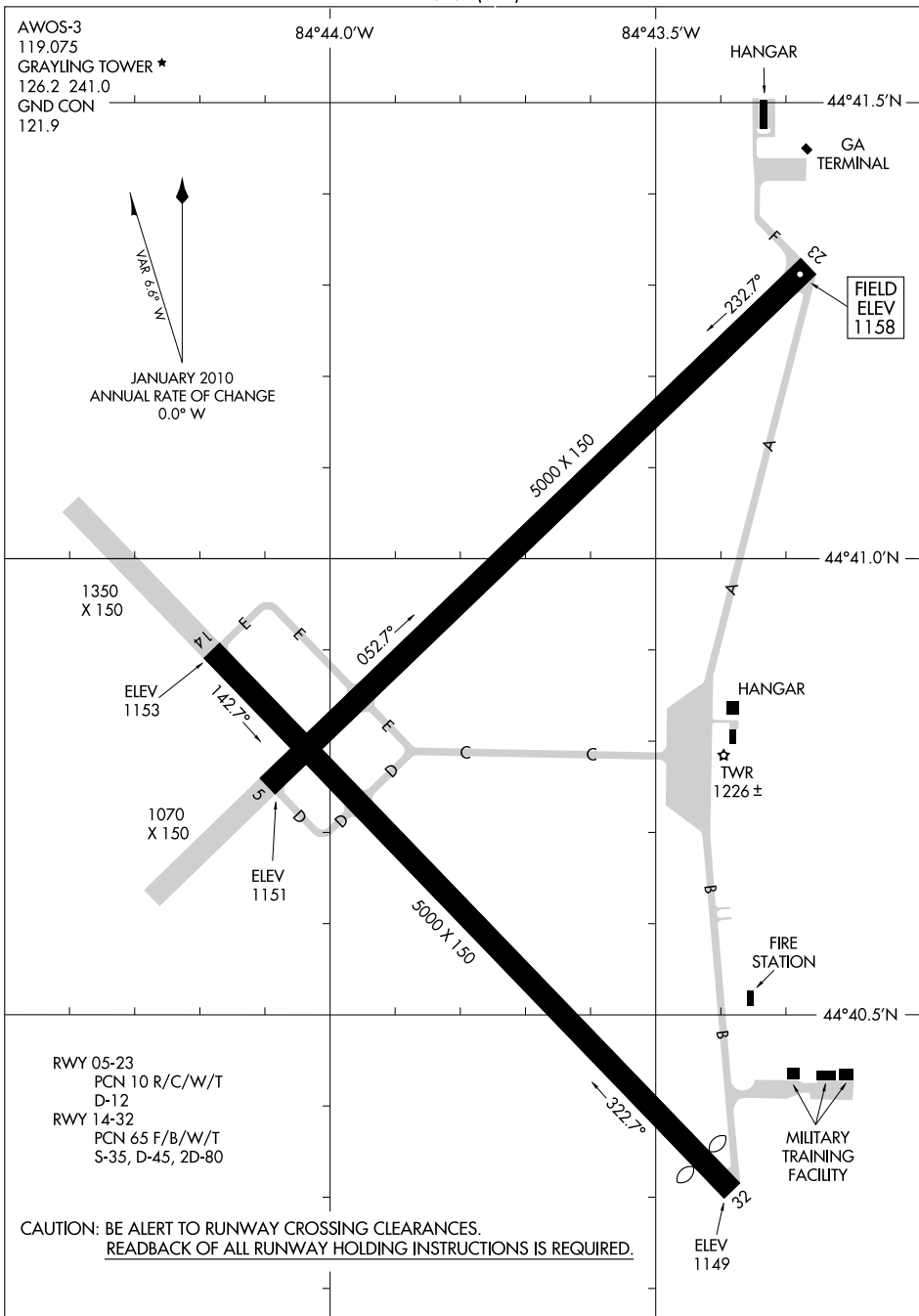
VOR RWY 35

## AIRPORT DIAGRAM

AL-5957 (FAA)

GRAYLING AAF (GOV)  
GRAYLING, MICHIGAN

EC-1, 23 SEP 2010 to 21 OCT 2010



EC-1, 23 SEP 2010 to 21 OCT 2010

## AIRPORT DIAGRAM

GRAYLING, MICHIGAN  
GRAYLING AAF (GOV)

**GRAYLING AAF** (GOV)(KGOV) CIV/MIL 1 NW UTC-5(-4DT) N44°40.82' W84°43.73'

LAKE HURON

1158 B TPA—See Remarks NOTAM FILE GOV

H-2L, L-31C

Rwy 05-23: H5000X150 (CONC) D-12 PCN 10 R/C/W/T MIRL

IAP, AD

Rwy 05: REIL. PAPI(P4L)—GA 4.0' TCH 41'. Trees.

Rwy 23: REIL. PAPI(P4L)—GA 3.0' TCH 30'. Trees.

Rwy 14-32: H5000X150 (ASPH) S-35, D-45, 2D-80

PCN 65 F/B/W/T MIRL

Rwy 14: REIL. PAPI(P4L)—GA 3.0' TCH 30'. Tree.

Rwy 32: REIL. PAPI(P4L)—GA 3.5' TCH 34'. Thld dsplcd 300'.

Trees.

**AIRPORT REMARKS:** Attended dawn-dusk. Wildlife on and in/ov arpt.

Extensive military helicopter tfc Jun thru Aug. ACTIVATE MIRL Rwy 14-32 and Rwy 05-23, REIL Rwy 05, Rwy 23, Rwy 14 and Rwy 32 and PAPI Rwy 05, Rwy 23, Rwy 14 and Rwy 32—CTAF. Rwy 05-23, Twy A, Twy D and Twy E CLOSED winter months, no snow removal.

**MILITARY REMARKS:** TFC PAT—Rotary wing 2000(842), fixed wing

2200(1042). MISC Ctc Base OPS DSN 623-3301,

C989-344-4301 or C517-648-5339.

**WEATHER DATA SOURCES:** AWOS-3 119.075 (989) 348-3127.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

MINNEAPOLIS CENTER APP/DEP CON 132.9 338.3

TOWER 126.2 241.0 (by NOTAM) GND CON 121.9

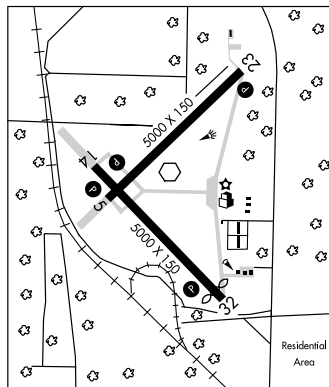
**RADIO AIDS TO NAVIGATION:** NOTAM FILE TVC.

TRAVERSE CITY (H) VORTACW 114.6 TVC Chan 93 N44°40.07' W85°33.00' 091° 35.2 NM to fld. 912/2W.

HIWAS.

(T) VORW 109.8 CGG N44°40.90' W84°43.74' at fld. NOTAM FILE GOV. Unmonitored.

NDB (MHW) 359 GYG N44°45.00' W84°49.70' 140° 6 NM to fld. NOTAM FILE GOV.



## GREEN LAKE (See INTERLOCHEN)

**GREENVILLE MUNI** (6D6) 3 S UTC-5(-4DT) N43°08.53' W85°15.23'

CHICAGO

855 B S4 FUEL 100LL NOTAM FILE LAN

L-28I

Rwy 10-28: H4199X75 (ASPH) S-23 MIRL 0.4% up W

IAP

Rwy 10: PAPI(P4L)—GA 3.5' TCH 27'. Trees.

Rwy 28: REIL. PAPI(P4L)—GA 3.0' TCH 32'. Trees.

Rwy 18-36: 1730X200 (TURF)

Rwy 18: Trees. Rwy 36: Thld dsplcd 378'. Trees.

**AIRPORT REMARKS:** Attended Apr-Oct 1300-2200Z, Nov-Mar

1300-0000Z. Deer on and in/ov arpt. Snow removal Rwy 10-28

only. Rwy 18-36 no plowing, verify conditions prior to landing. Rwy

18-36 and dsplcd thld marked with 3' yellow cones. ACTIVATE

MIRL Rwy 10-28—CTAF.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

Ⓡ GRAND RAPIDS APP/DEP CON 124.6 (1030-0500Z)

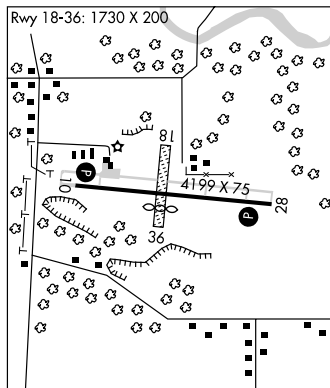
Ⓡ CHICAGO CENTER/APP DEP CON 124.6 (0500-1030Z)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE GRR.

GRAND RAPIDS (H) VOR/DME 115.95 GRR Chan

106(Y) N42°47.20' W85°29.82' 031° 23.9 NM to fld.

803/4W. DME unmonitored.



NDB GYG <b>359</b>	APP CRS <b>142°</b>	Rwy Idg TDZE Apt Elev <b>5000</b> <b>1151</b> <b>1156</b>
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# NDB RWY 14

GRAYLING AAF (GOV)

▼ Visibility reduction by helicopters NA.  
 ▲ NA When local altimeter setting not received, use Houghton Lake altimeter setting and increase all MDA 60 feet and S-14 and Circling Cat B, C, and D visibility ¼ mile.

MISSED APPROACH: Climbing right turn to 3000 direct GYG NDB and hold.

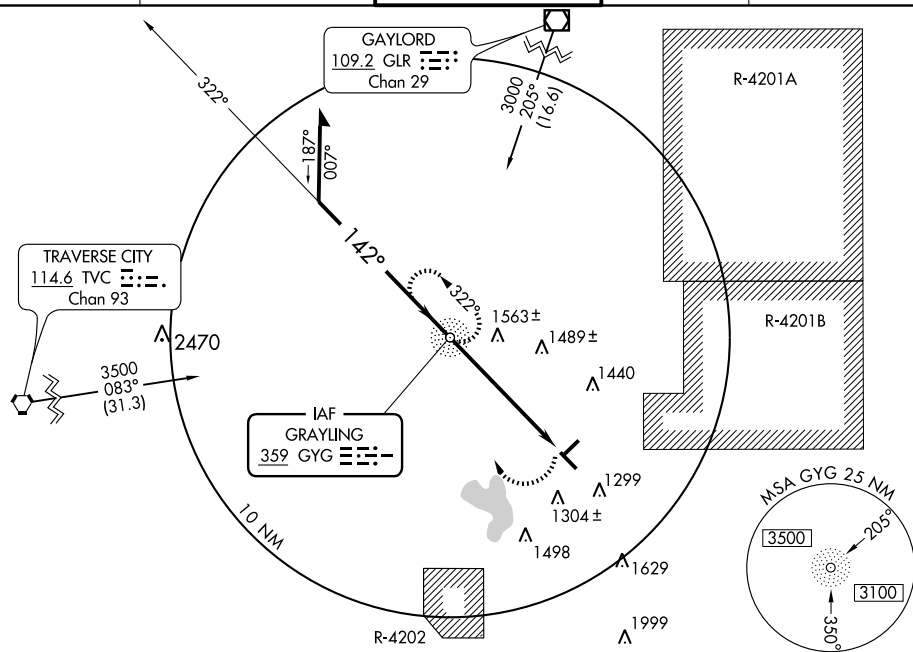
AWOS-3  
**119.075**

MINNEAPOLIS CENTER  
**132.9 338.3**

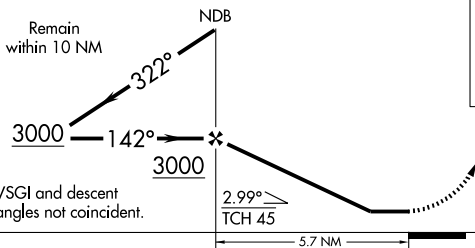
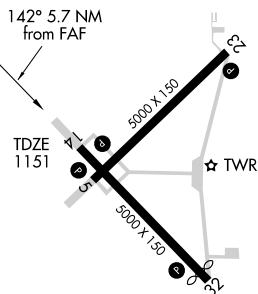
GRAYLING TOWER ★  
**126.2 241.0**

GND CON  
**121.9**

UNICOM  
**122.8 (CTAF) 0**



ELEV 1156



CATEGORY	A	B	C	D
S-14	1880-1	729 (800-1)	1880-2 729 (800-2)	1880-2¼ 729 (800-2¼)
CIRCLING	1880-1	724 (800-1)	1880-2 724 (800-2)	1880-2¼ 724 (800-2¼)

REIL Rwy 5, 23, 14 and 32 0  
 MRL Rwy 5-23 and 14-32 0

FAF to MAP 5.7 NM

Knots	60	90	120	150	180
Min:Sec	5:42	3:48	2:51	2:17	1:54

APP CRS	Rwy Idg	<b>5000</b>
<b>142°</b>	TDZE	<b>1151</b>
	Apt Elev	<b>1156</b>

# RNAV (GPS) RWY 14

## GRAYLING AAF (GOV)

- ▼ DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.  
VDP NA when using Houghton Lake altimeter setting.
- ▲ When local altimeter setting not received, use Houghton Lake altimeter setting and increase all MDA 60 feet, increase LNAV Cat C and D and Circling Cat C visibility ¼ mile.

MISSED APPROACH: Climbing right turn to 3000 direct MAMER and hold.

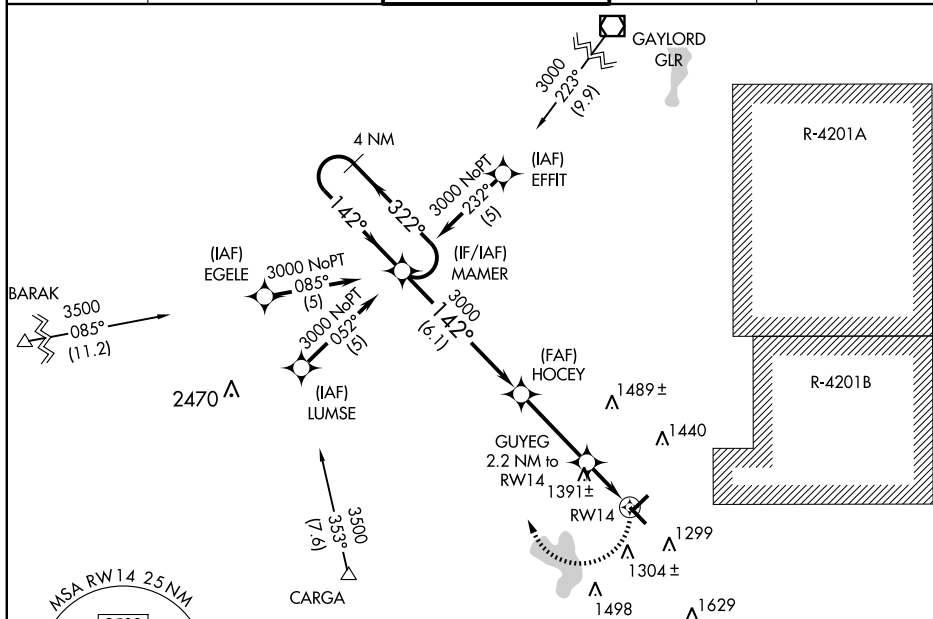
AWOS-3  
**119.075**

MINNEAPOLIS CENTER  
**132.9 338.3**

GRAYLING TOWER ★  
**126.2 241.0**

GND CON  
**121.9**

UNICOM  
**122.8 (CTAF) 0**



ELEV **1156**

4 NM  
Holding Pattern

MAMER HOCEY

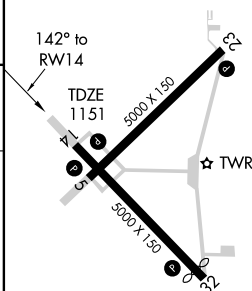
GUYEG  
2.2 NM to  
RW14

3000  
MAMER

1.6 NM to  
RW14

VSGI and descent angles  
not coincident.

CATEGORY	A	B	C	D
LNAV MDA	1700-1 549 (600-1)	1700-1½ 549 (600-1½)	1700-1¾ 549 (600-1¾)	1700-2 604 (700-2)
CIRCLING	1720-1 564 (600-1)	1720-1½ 564 (600-1½)	1760-2 604 (700-2)	



REIL Rwy 5, 23, 14 and 32 0  
MIRL Rwy 5-23 and 14-32 0

VOR CGG <b>109.8</b>	APP CRS <b>127°</b>	Rwy Idg TDZE Apt Elev	<b>5000</b> <b>1151</b> <b>1156</b>
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# VOR RWY 14

GRAYLING AAF (GOV)

▼ Visibility reduction by helicopters NA.  
 ▲ NA When local altimeter setting not received, use Houghton Lake altimeter setting and increase all MDA 60 feet, increase S-14 and Circling Cat B, C, and D and GORDN FIX minimums S-14 Cat C and D and Circling Cat C visibility ¼ mile.

MISSED APPROACH: Climbing right turn to 3500 in CGG VOR holding pattern.

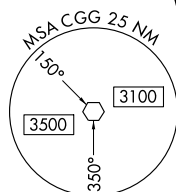
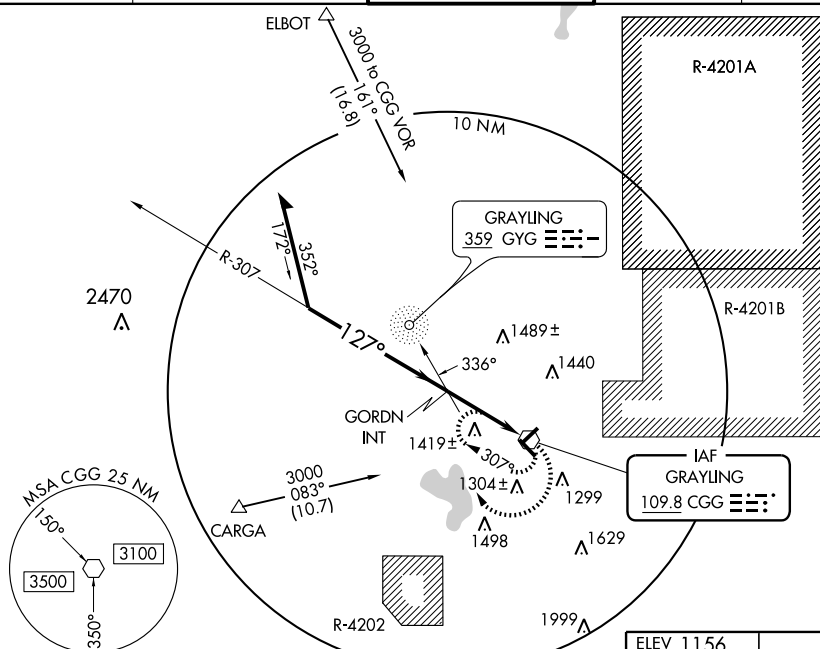
AWOS-3  
**119.075**

MINNEAPOLIS CENTER  
**132.9 338.3**

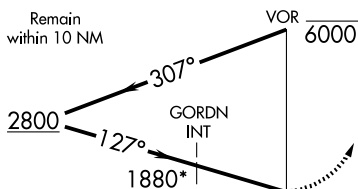
GRAYLING TOWER ★  
**126.2 241.0**

GND CON  
**121.9**

UNICOM  
**122.8 (CTAF) 0**

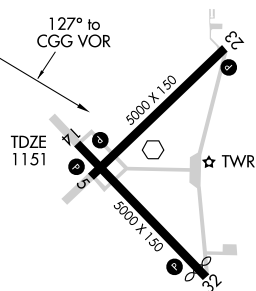


ELEV 1156



\*1940 when using Houghton Lake altimeter setting.

CATEGORY	A	B	C	D
S-14	1880-1 729 (800-1)		1880-2 729 (800-2)	1880-2 ¼ 729 (800-2 ¼)
CIRCLING	1880-1 724 (800-1)		1880-2 724 (800-2)	1880-2 ¼ 724 (800-2 ¼)
GORDN FIX MINIMUMS				
S-14	1720-1 569 (600-1)		1720-1 ½ 569 (600-1 ½)	1720-1 ¾ 569 (600-1 ¾)
CIRCLING	1720-1 564 (600-1)		1720-1 ½ 564 (600-1 ½)	1760-2 604 (700-2)



REIL Rwy 5, 23, 14 and 32 0  
 MIRL Rwy 5-23 and 14-32 0



**GRAYLING AAF** (GOV)(KGOV) CIV/MIL 1 NW UTC-5(-4DT) N44°40.82' W84°43.73'

LAKE HURON

1158 B TPA—See Remarks NOTAM FILE GOV

H-2L, L-31C

Rwy 05-23: H5000X150 (CONC) D-12 PCN 10 R/C/W/T MIRL

IAP, AD

Rwy 05: REIL. PAPI(P4L)—GA 4.0' TCH 41'. Trees.

Rwy 23: REIL. PAPI(P4L)—GA 3.0' TCH 30'. Trees.

Rwy 14-32: H5000X150 (ASPH) S-35, D-45, 2D-80

PCN 65 F/B/W/T MIRL

Rwy 14: REIL. PAPI(P4L)—GA 3.0' TCH 30'. Tree.

Rwy 32: REIL. PAPI(P4L)—GA 3.5' TCH 34'. Thld dsplcd 300'.

Trees.

**AIRPORT REMARKS:** Attended dawn-dusk. Wildlife on and in/ov arpt.

Extensive military helicopter tfc Jun thru Aug. ACTIVATE MIRL Rwy 14-32 and Rwy 05-23, REIL Rwy 05, Rwy 23, Rwy 14 and Rwy 32 and PAPI Rwy 05, Rwy 23, Rwy 14 and Rwy 32—CTAF. Rwy 05-23, Twy A, Twy D and Twy E CLOSED winter months, no snow removal.

**MILITARY REMARKS:** TFC PAT—Rotary wing 2000(842), fixed wing

2200(1042). MISC Ctc Base OPS DSN 623-3301,

C989-344-4301 or C517-648-5339.

**WEATHER DATA SOURCES:** AWOS-3 119.075 (989) 348-3127.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

MINNEAPOLIS CENTER APP/DEP CON 132.9 338.3

TOWER 126.2 241.0 (by NOTAM) GND CON 121.9

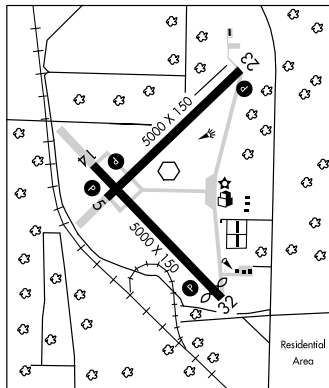
**RADIO AIDS TO NAVIGATION:** NOTAM FILE TVC.

TRAVERSE CITY (H) VORTACW 114.6 TVC Chan 93 N44°40.07' W85°33.00' 091° 35.2 NM to fld. 912/2W.

HIWAS.

(T) VORW 109.8 CGG N44°40.90' W84°43.74' at fld. NOTAM FILE GOV. Unmonitored.

NDB (MHW) 359 GYG N44°45.00' W84°49.70' 140° 6 NM to fld. NOTAM FILE GOV.



## GREEN LAKE (See INTERLOCHEN)

**GREENVILLE MUNI** (6D6) 3 S UTC-5(-4DT) N43°08.53' W85°15.23'

CHICAGO

855 B S4 FUEL 100LL NOTAM FILE LAN

L-28I

Rwy 10-28: H4199X75 (ASPH) S-23 MIRL 0.4% up W

IAP

Rwy 10: PAPI(P4L)—GA 3.5' TCH 27'. Trees.

Rwy 28: REIL. PAPI(P4L)—GA 3.0' TCH 32'. Trees.

Rwy 18-36: 1730X200 (TURF)

Rwy 18: Trees. Rwy 36: Thld dsplcd 378'. Trees.

**AIRPORT REMARKS:** Attended Apr-Oct 1300-2200Z, Nov-Mar

1300-0000Z. Deer on and in/ov arpt. Snow removal Rwy 10-28

only. Rwy 18-36 no plowing, verify conditions prior to landing. Rwy

18-36 and dsplcd thld marked with 3' yellow cones. ACTIVATE

MIRL Rwy 10-28—CTAF.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

Ⓡ GRAND RAPIDS APP/DEP CON 124.6 (1030-0500Z)

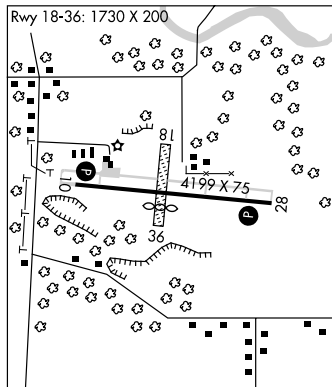
Ⓡ CHICAGO CENTER/APP DEP CON 124.6 (0500-1030Z)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE GRR.

GRAND RAPIDS (H) VOR/DME 115.95 GRR Chan

106(Y) N42°47.20' W85°29.82' 031° 23.9 NM to fld.

803/4W. DME unmonitored.



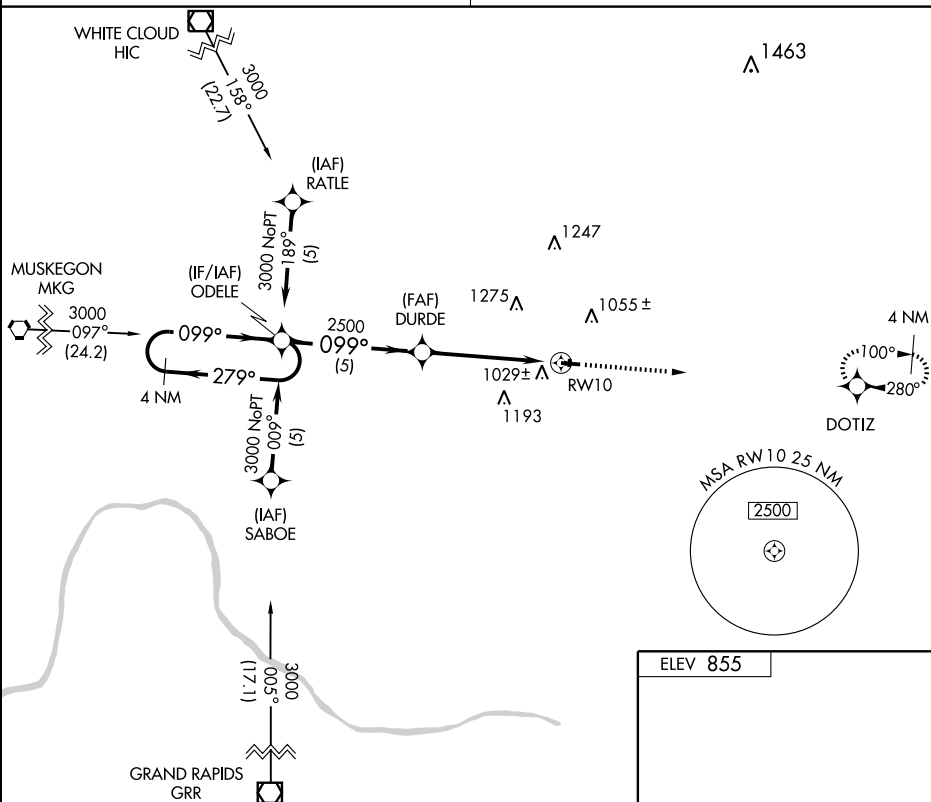
APP CRS  
**099°**Rwy Idg **4199**  
TDZE **855**  
Apt Elev **855****RNAV (GPS) RWY 10**  
GREENVILLE MUNI (6D6)

▼ Use Grand Rapids/Gerald R. Ford Intl altimeter setting.  
 ▲ NA GPS or RNP-0.3 required.  
 DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 3000 via 100° course  
to DOTIZ WP and hold.

GRAND RAPIDS APP CON ★  
**124.6 257.6**

UNICOM  
**122.8** (CTAF) **0**



ELEV 855

4 NM  
Holding Pattern

3000  
← 279°  
099° →

ODELE

DURDE

3000  
↑  
CRS 100°



TDZE

855

4199 X 75

099° to RWY 10

81

730 X 200

36

0.4% UP

28

VGSI and descent angles  
not coincident.

2500  
3.04°  
TCH 40

RWY 10

CATEGORY	A	B	C	D
RNAV MDA	1340-1	485 (500-1)	1340-1½ 485 (500-1½)	NA
CIRCLING	1400-1	545 (600-1)	1420-1½ 565 (600-1½)	NA

REIL Rwy 28  
MIRL Rwy 10-28 **0**

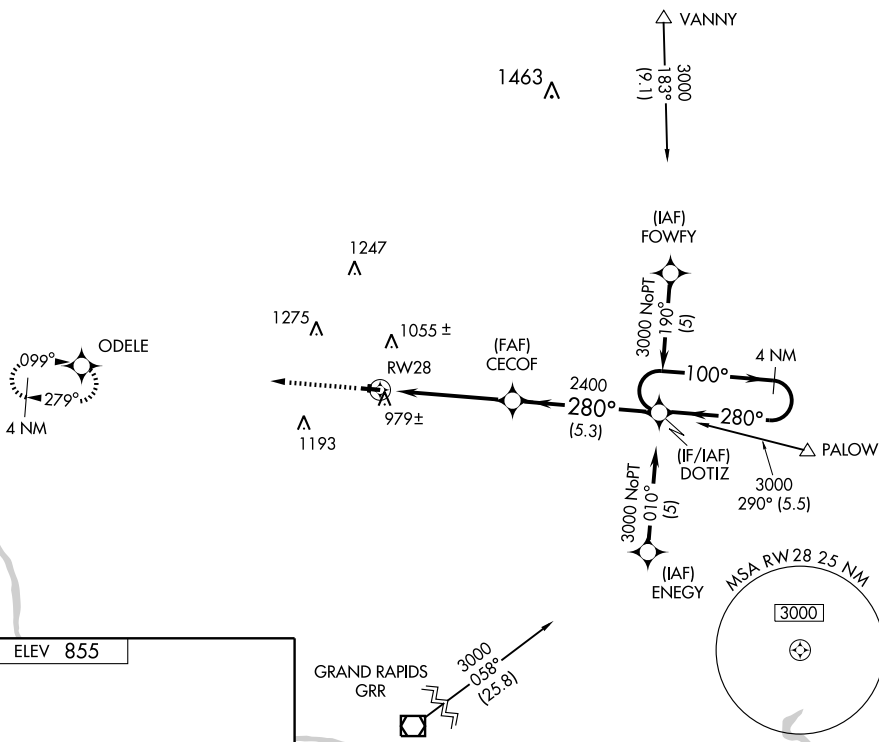
APP CRS  
**280°**Rwy Idg **4199**  
TDZE **847**  
Apt Elev **855****RNAV (GPS) RWY 28**  
GREENVILLE MUNI (6D6)

▼ Use Grand Rapids/Gerald R. Ford Intl altimeter setting.  
 ▲ NA GPS or RNP-0.3 required.  
 DME/DME RNP-0.3 NA.

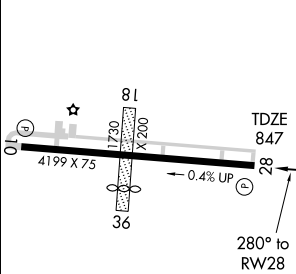
MISSED APPROACH: Climb to 3000 via 280° course  
to ODELE WP and hold.

GRAND RAPIDS APP CON ★  
**124.6 257.6**

UNICOM  
**122.8 (CTAF) 0**



ELEV 855



REIL Rwy 28  
 MIRL Rwy 10-28 0

CATEGORY	A	B	C	D
RNAV MDA	1300-1	453 (500-1)	1300-1½ 453 (500-1½)	NA
CIRCLING	1400-1	545 (600-1)	1420-1½ 565 (600-1½)	NA

VOR/DME GRR  
**115.95**  
Chan **106** (Y)

APP CRS  
031°

Rwy Idg	TDZE	Apt Elev
1	10	10
2	10	10
3	10	10
4	10	10
5	10	10
6	10	10
7	10	10
8	10	10
9	10	10
10	10	10
11	10	10
12	10	10
13	10	10
14	10	10
15	10	10
16	10	10
17	10	10
18	10	10
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93	10	10
94	10	10
95	10	10
96	10	10
97	10	10
98	10	10
99	10	10
100	10	10

N/A  
N/A  
855

VOR/DME-A  
GREENVILLE MUNI (6D6)



ANA

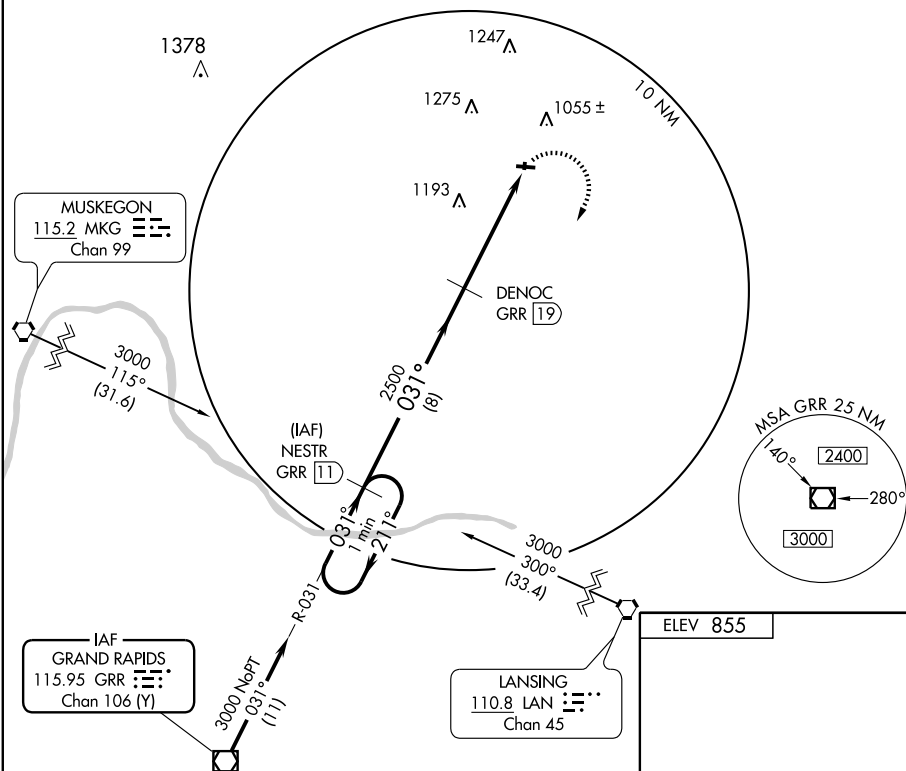
Use Grand Rapids/Gerald R. Ford Intl altimeter setting.

**MISSED APPROACH:** Climbing right turn to 3000 via the GRR VOR/DME R-031 to NESTR and hold.

GRAND RAPIDS APP CON★

124.6    257.6

UNICOM

122.8 (CTAF) **L**

## One Minute Holding Pattern

NESTR  
GRR 11
$$\frac{3000}{031^\circ} \leftarrow 211^\circ$$

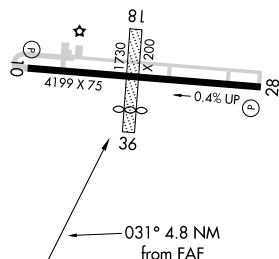
031°

00 \*

3000  
GRR R-03

NESTIR  
GRR 11

1

REIL Rwy 28  
MIRI Rwy 10-28

CATEGORY	A	B	C	D
CIRCLING	1500-1 645 (700-1)	1500-1¼ 645 (700-1¼)	1500-1¾ 645 (700-1¾)	NA

## HANCOCK

**HOUGHTON CO MEM** (CMX) 4 NE UTC-5(-4DT) N47°10.11' W88°29.34'

1095 B S4 FUEL 100LL, JET A Class I, ARFF Index A NOTAM FILE CMX

RWY 13-31: H6501X150 (ASPH-GRVD) S-70, D-100, 2S-127, 2D-185 HIRL 0.5% up NW

RWY 13: REIL. PAPI(P4L)—GA 3.0° TCH 44'. Trees.

RWY 31: MALSR. PAPI(P4L)—GA 3.0° TCH 45'.

RWY 07-25: H5196X100 (ASPH-PFC) S-35, D-50 MIRL  
0.3% up NE

RWY 07: REIL. PAPI(P2L)—GA 3.0° TCH 30'. Trees.

RWY 25: REIL. PAPI(P4L)—GA 3.0° TCH 41'. Trees.

**RUNWAY DECLARED DISTANCE INFORMATION**

RWY 07: TORA-5196 TODA-5196 ASDA-5196 LDA-5196

RWY 13: TORA-6501 TODA-6501 ASDA-6501 LDA-6501

RWY 25: TORA-5196 TODA-5196 ASDA-5196 LDA-5196

RWY 31: TORA-6501 TODA-6501 ASDA-6501 LDA-6501

**AIRPORT REMARKS:** Attended 0900-0500Z†. PAEW on arpt monitor CTAF. Frequent snow removal ops in progress various times Nov-Apr monitor CTAF. Airframe and power plant repairs avbl Apr 15 thru Nov 15. Arpt CLOSED to unscheduled air carrier ops with more than 30 passenger seats except PPR call arpt manager 906-482-3970. Deer and gulls on and invof arpt. General aviation acft parking permitted in front of air carrier terminal building. Contact Unicom for permission to park in front of terminal. General aviation acft parking on aprons lctd N and S of terminal building. Arpt has dual PCL. ACTIVATE HIRL Rwy 13-31, MIRL Rwy 07-25, PAPI Rwy 13, Rwy 31, Rwy 07, and Rwy 25, REIL Rwy 13, Rwy 07, and Rwy 25, MALSR Rwy 31 and Twy B—CTAF. Airfield guidance signs snow covered in winter. Ldg fee waived with fuel purchase for multi-engine acft only.

**WEATHER DATA SOURCES:** ASOS 125.675 (906) 482-4248. HIWAS 112.8 CMX.

**COMMUNICATIONS:** CTAF/UNICOM 122.7

HANCOCK RCO 123.65 122.525 (GREEN BAY RADIO)

① MINNEAPOLIS CENTER APP/DEP CON 127.2

**AIRSPACE:** CLASS E svc continuous.

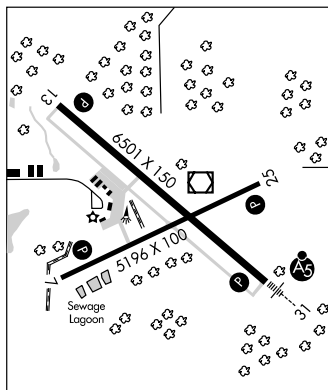
**RADIO AIDS TO NAVIGATION:** NOTAM FILE CMX.

(L) VORW/DME 112.8 CMX Chan 75 N47°10.22' W88°29.12' at fld. 1072/2W. HIWAS.

DME unusable 315°-035° byd 30 NM blo 3500'.

GALEY NDB (MHW/LOM) 275 CM N47°06.94' W88°24.07' 313° 4.8 NM to fld. Unmonitored.

ILS/DME 110.3 I-CMX Chan 40 Rwy 31. Class IT. LOM GALEY NDB. LOC BC unusable byd 13° left and right of course. LOC BC and BC DME unusable byd 10 NM blo 2600'.



**HANLEY FLD** (See MUNISING)

**HARBOR SPRINGS** (MGN) 3 E UTC-5(-4DT) N45°25.53' W84°54.80'

686 B FUEL 100LL, JET A NOTAM FILE MGN

RWY 10-28: H4157X75 (ASPH) S-22, D-30 MIRL

RWY 10: PAPI(P4R)—GA 3.5° TCH 25. Thld dspcd 445'. Pole.

RWY 28: (NSTD) PAPI(P4L)—GA 4.0° TCH 35. Thld dspcd 445'. Trees.

**AIRPORT REMARKS:** Attended 1300-dusk. Parachute Jumping. Birds and deer on and invof arpt. Rwy 28 +46' antenna 186' from dspcd thld 234' right. Noise abatement procedures; no turbojet/turbopfan acft departures from 0400 to 1200Z†, no low flight over surrounding community, all acft departing to the W turn S over the water as soon as practical. ACTIVATE MIRL Rwy 10-28—CTAF. Lgts extinguish with 3 clicks during daytime ops. Landing fee waived with minimum fuel purchase.

**WEATHER DATA SOURCES:** AWOS-3 119.925 (231) 347-5231.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

① MINNEAPOLIS CENTER APP/DEP CON 134.6

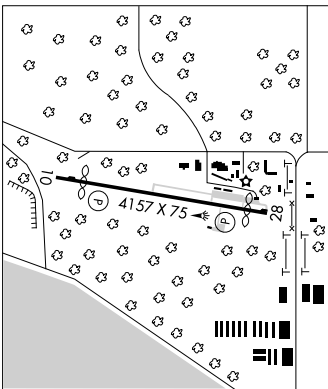
**RADIO AIDS TO NAVIGATION:** NOTAM FILE PLN.

PELLSTON (L) VORTACW 111.8 PLN Chan 55 N45°37.84'

W84°39.85' 227° 16.2 NM to fld. 840/6W.

HIWAS.

**COMM/NAV/WEATHER REMARKS:** AWOS-3 Wind unreliable btn 260°-280°.



**LAKE HURON**

L-31B

IAP

LOC/DME I-CMX <b>110.3</b> Chan <b>40</b>	APP CRS <b>313°</b>	Rwy Idg TDZE <b>1070</b> Apt Elev <b>1095</b>
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## ILS or LOC RWY 31

HANCOCK / HOUGHTON COUNTY MEMORIAL (CMX)

- ▼ For inoperative MALSR, increase S-LOC 31 Cat D visibility to 1 mile.
- ▲ When local altimeter setting not received use Marquette altimeter setting and increase DA to 1441 and S-ILS 31 visibility to  $\frac{3}{4}$ , increase all MDA 180' and S-LOC 31 visibility Cat C to  $\frac{3}{4}$  mile, Cat D to 1 mile. Increase Circling Cat C visibility to  $1\frac{3}{4}$  mile, Cat D visibility to  $2\frac{1}{2}$  mile. For inoperative MALSR when using Marquette altimeter setting increase S-ILS 31 visibility all Cats to  $1\frac{1}{4}$  mile.
- VDP NA when using Marquette altimeter setting. Request MIRL Rwy 7-25 CTAf.

MALSR

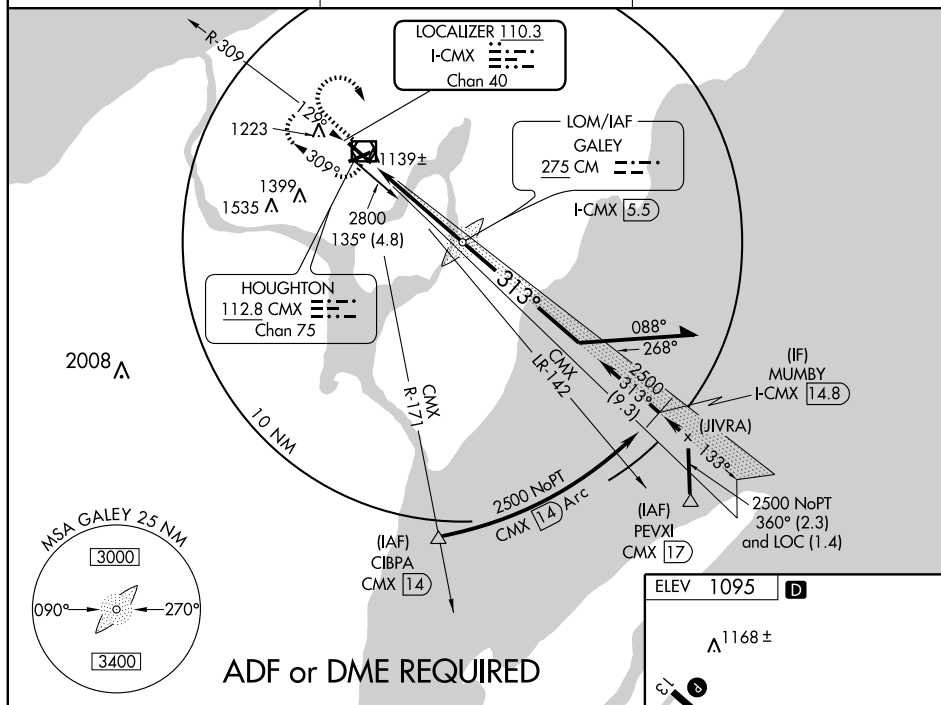


MISSED APPROACH:  
Climb to 3100 then right  
turn direct CMX VOR/DME  
and hold.

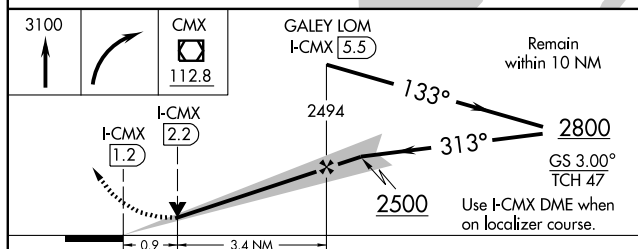
ASOS  
**125.675**

MINNEAPOLIS CENTER  
**127.2 379.1**

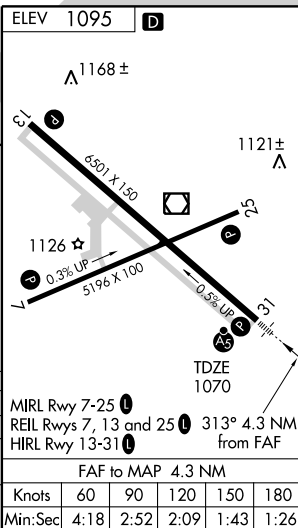
UNICOM  
**122.7 (CTAF) 0**



ADF or DME REQUIRED



CATEGORY	A	B	C	D
S-ILS 31		1270- $\frac{1}{2}$ 200 (200- $\frac{1}{2}$ )		
S-LOC 31		1400- $\frac{1}{2}$ 330 (400- $\frac{1}{2}$ )		
CIRCLING	1620-1 525 (600-1)	1640-1 545 (600-1)	1640- $\frac{1}{2}$ 545 (600- $\frac{1}{2}$ )	1400- $\frac{3}{4}$ 330 (400- $\frac{3}{4}$ ) 1780-2 $\frac{1}{4}$ 685 (700-2 $\frac{1}{4}$ )



LOC/DME I-CMX <b><u>110.3</u></b> Chan <b>40</b>	APP CRS <b>133°</b>	Rwy Idg <b>6501</b> TDZE <b>1095</b> Apt Elev <b>1095</b>
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LOC/DME BC RWY 13


HANCOCK / HOUGHTON COUNTY MEMORIAL (CMX)

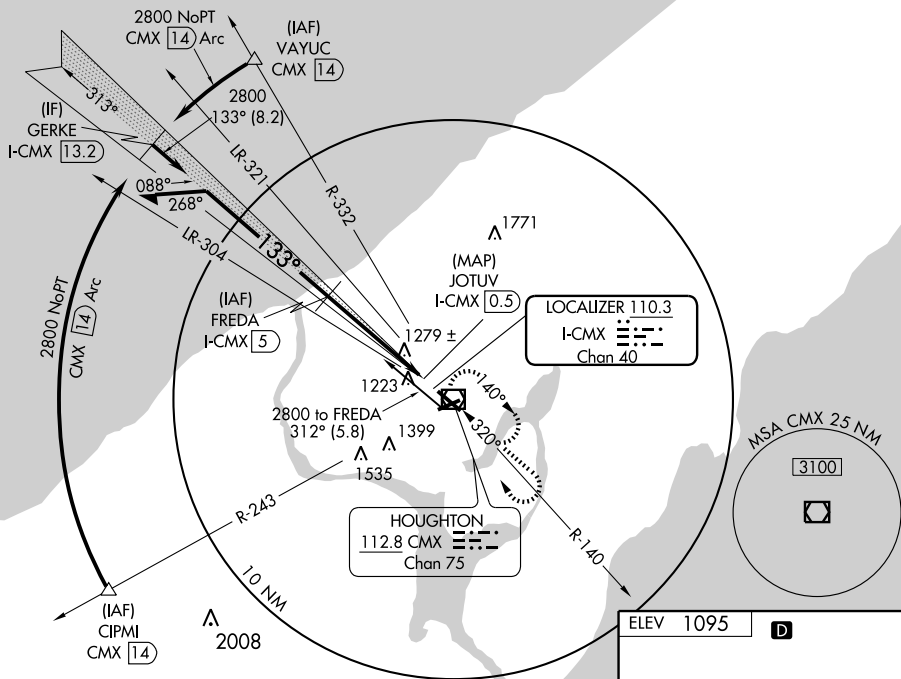
- T** Request MRL Rwy 7-25 CTAF.  
**A** When local altimeter setting not received use Marquette altimeter setting and increase all MDA 180 feet and S-13 Cat C and D visibility  $\frac{1}{2}$  mile, increase Circling visibility Cat C and D  $\frac{1}{4}$  mile.  
VDP NA when using Marquette altimeter setting.

**MISSED APPROACH:** Climb to 3100 then right turn direct CMX VOR/DME and hold.

ASOS  
125.675

MINNEAPOLIS CENTER  
127.2 379.1

UNICOM  
122.7 (CTAF) 



## BACK COURSE

ELEV	1095	
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Remain  
within 10 NM

Diagram illustrating a triangle with angles  $313^\circ$  and  $133^\circ$ , and a side length of 2800. The triangle is labeled "FREDA" and "I-CMX" with a circled "5".

Use I-CMX DME when on localizer course  
Disregard glide slope indications.

TCH 43

	3100
--	------

CMX  
  
 112.8

CATEGORY	A	B	C	D
S-13	1540-1	445 (500-1)	1540-1¼ 445 (500-1¼)	1540-1½ 445 (500-1½)
CIRCLING	1620-1 525 (600-1)	1640-1 545 (600-1)	1640-1½ 545 (600-1½)	1780-2¼ 685 (700-2¼)

MIRL Rwy 7-25 **L**  
REIL Rwys 7, 13 and 25 **L**  
HIRL Rwy 13-31 **L**

HANCOCK, MICHIGAN  
Amdt 12 10042

HANCOCK / HOUGHTON COUNTY MEMORIAL (CMX)  
47°10'N - 88°29'W LOC/DME BC RWY 13

LOC/DME BC RWY 13

EC-1. 23 SEP 2010 to 21 OCT 2010

APP CRS	Rwy Idg	<b>5196</b>
<b>069°</b>	TDZE	<b>1067</b>
	Apt Elev	<b>1095</b>

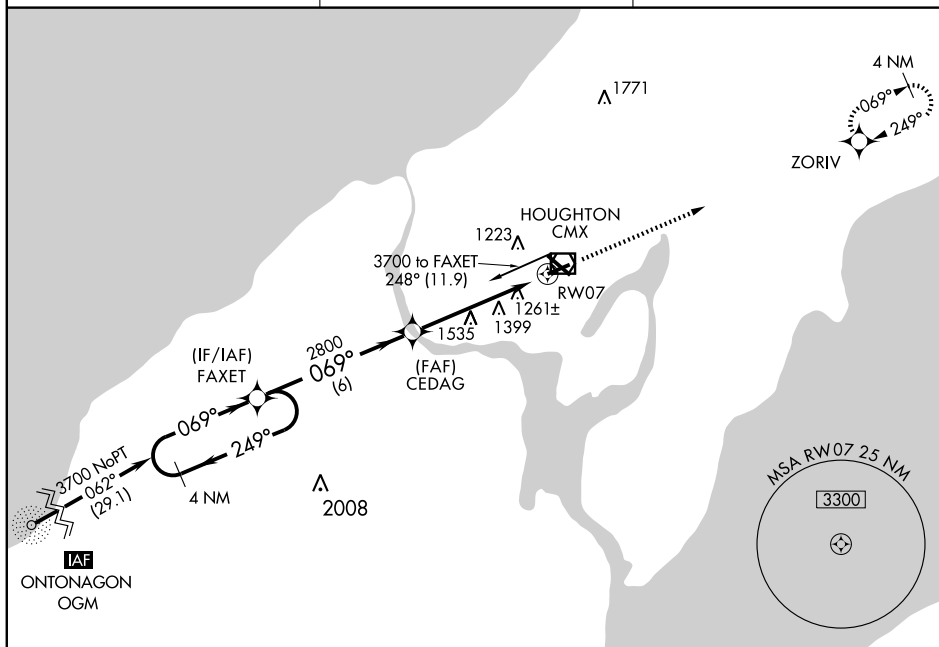
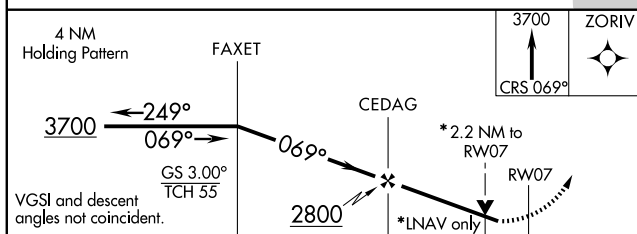
**RNAV (GPS) RWY 7**

HANCOCK/ HOUGHTON COUNTY MEMORIAL (CMX)

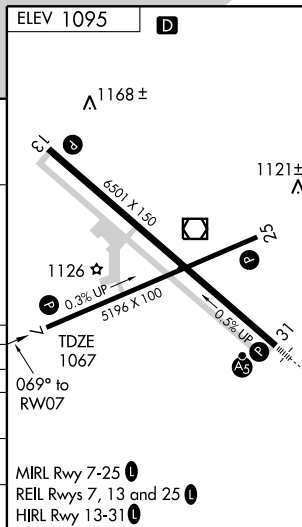
<b>▼</b> <b>▲</b> NA Baro-VNAV NA below -17°C (2°F). GPS or RNP -0.3 required. DME/DME RNP -0.3 NA.	MISSED APPROACH: Climb to 3700 via 069° course to ZORIV WP and hold.
---	--

 ASOS  
**125.675**

 MINNEAPOLIS CENTER  
**127.2 379.1**

 UNICOM  
**122.7 (CTAF) 0**
**IAF** ARM APPROACH MODE PRIOR TO IAF.

CATEGORY	A	B	C	D
GLS DA	NA			
LNAV/ VNAV DA	1520-1½ 453 (500-1½)			
LNAV MDA	1840-1 773 (800-1)	1840-1¼ 773 (800-1¼)	1840-2¼ 773 (800-2¼)	1840-2½ 773 (800-2½)
CIRCLING	1840-1½ 745 (800-1½)		1840-2¼ 745 (800-2¼)	1840-2½ 745 (800-2½)





APP CRS  
**133°**

Rwy Idg  
TDZE  
**1095**

Apt Elev  
**1095**

# RNAV (GPS) RWY 13

HANCOCK/ HOUGHTON COUNTY MEMORIAL (CMX)



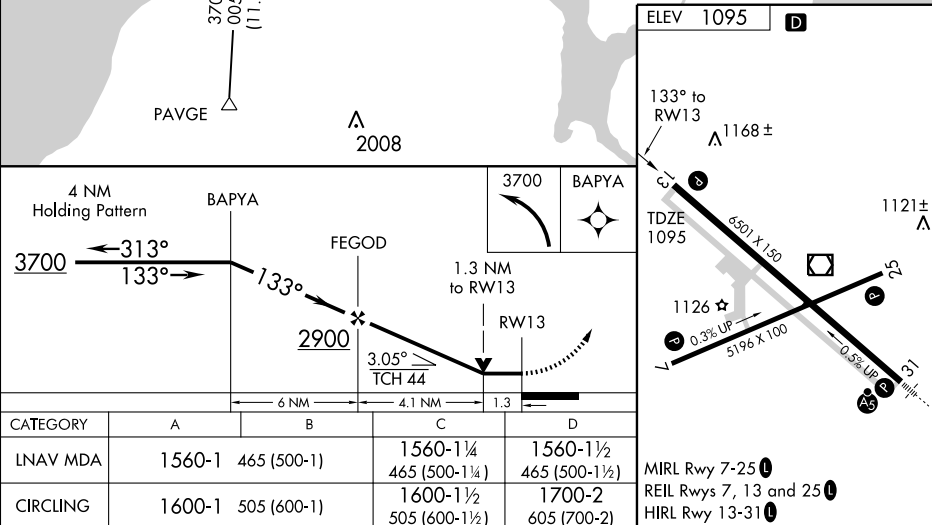
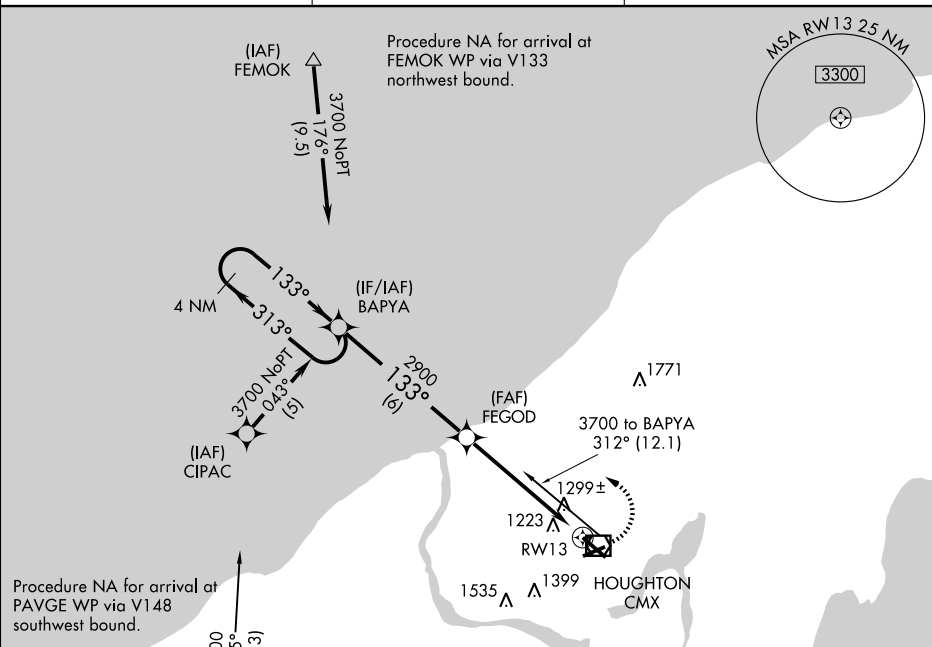
GPS or RNP-0.3 required.  
DME/DME RNP-0.3 NA.

MISSED APPROACH: Climbing left turn to 3700 direct  
BAPYA WP and hold.

ASOS  
**125.675**

MINNEAPOLIS CENTER  
**127.2 379.1**

UNICOM  
**122.7 (CTAF) 0**



APP CRS  
**249°**

Rwy Idg  
**5196**

TDZE  
**1074**

Apt Elev  
**1095**

# RNAV (GPS) RWY 25

HANCOCK/HOUGHTON COUNTY MEMORIAL (CMX)



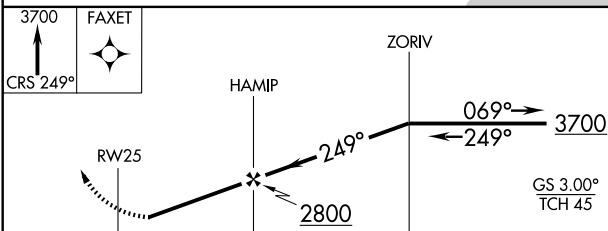
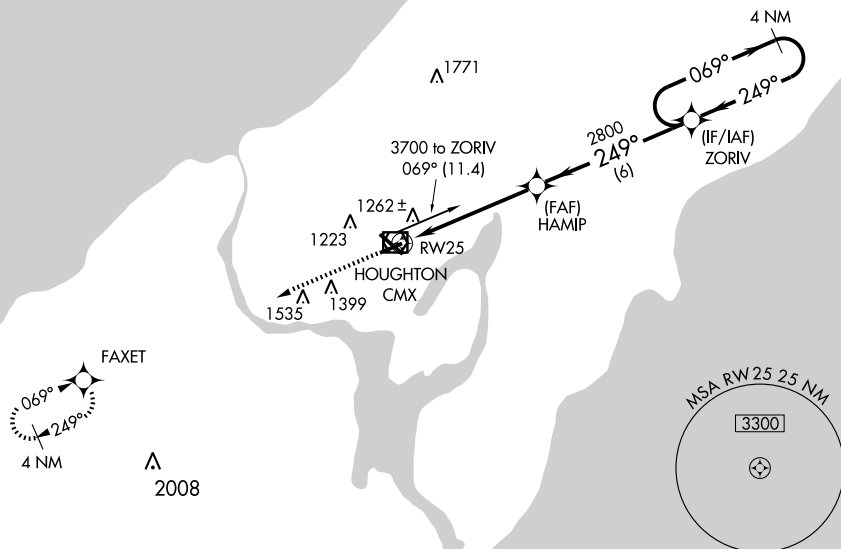
Baro-VNAV NA below -17°C (2°F)  
GPS or RNP -0.3 required.  
DME/DME RNP -0.3 NA.

MISSED APPROACH: Climb to 3700 via 249° course to FAXET WP and hold.

ASOS  
**125.675**

MINNEAPOLIS CENTER  
**127.2 379.1**

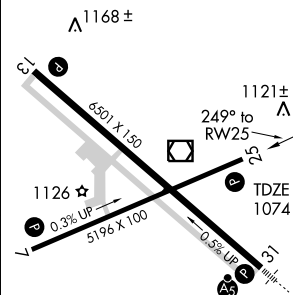
UNICOM  
**122.7 (CTAF) 0**



CATEGORY	A	B	C	D
GLS DA	NA			
LNAV/VNAV DA	1520-1½ 446 (500-1½)			
LNAV MDA	1520-1 446 (500-1)	1520-1¼ 446 (500-1¼)	1520-1½ 446 (500-1½)	
CIRCLING	1580-1½ 485 (500-1½)			1700-2 605 (700-2)

ELEV 1095

**D**



MIRL Rwy 7-25 0  
REIL Rwy 7, 13 and 25 0  
HIRL Rwy 13-31 0

WAAS CH <b>45809</b> <b>W31A</b>	APP CRS <b>313°</b>	Rwy Idg <b>6501</b> TDZE <b>1070</b> Apt Elev <b>1095</b>
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RNAV (GPS) RWY 31

HANCOCK/HOUGHTON COUNTY MEMORIAL (CMX)

**T** For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or  
**A** above 46°C (114°F). DME/DME RNP-0.3 NA. For inoperative MALSR, increase  
LPV visibility all Cats to 1 mile, increase LNAV/VNAV Cat D visibility to 1 mile.  
Inoperative table does not apply to LNAV Cat D.

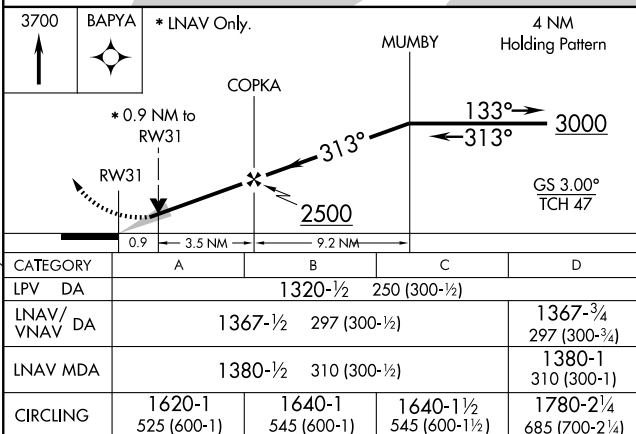
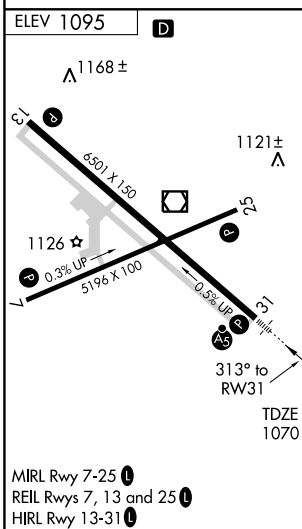
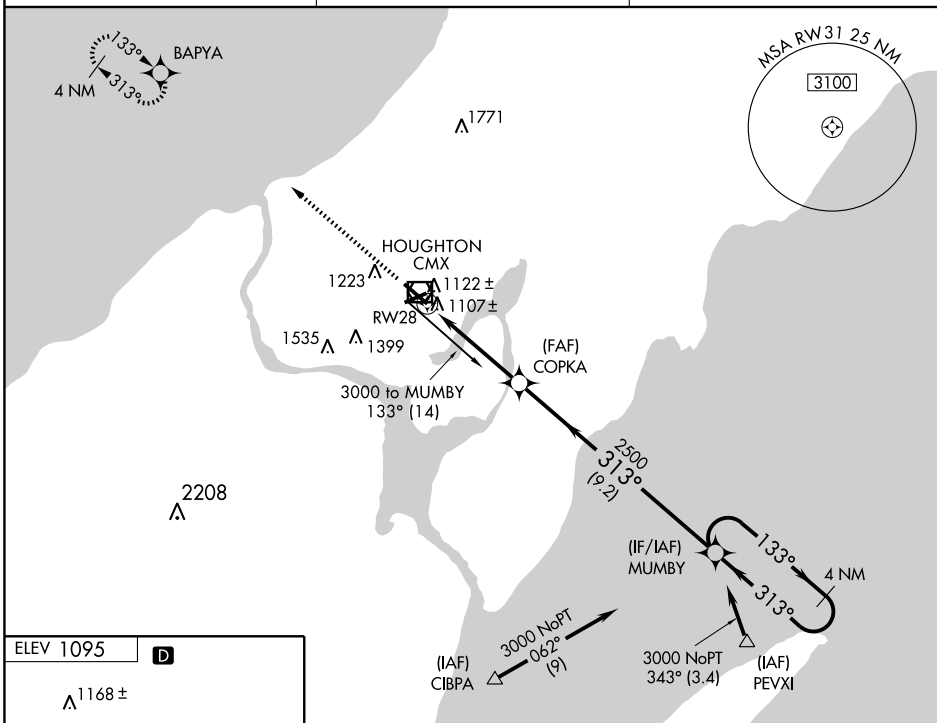
MALSR



**MISSED APPROACH:**  
Climb to 3700 direct  
BAPYA and hold.

ASOS  
125.675

MINNEAPOLIS CENTER  
127.2 379.1

UNICOM  
122.7 (CTAF) **L**

HANCOCK, MICHIGAN  
Orig 10042

HANCOCK/HOUGHTON COUNTY MEMORIAL (CMX)  
47°10'N - 88°29'W **RNAV (GPS) RWY 31**

RNAV (GPS) RWY 31



VOR/DME CMX	APP CRS	Rwy Idg	5196
112.8	260°	TDZE	1074
Chan 75		Apt Elev	1095

VOR RWY 25

HANCOCK / HOUGHTON COUNTY MEMORIAL (CMX)

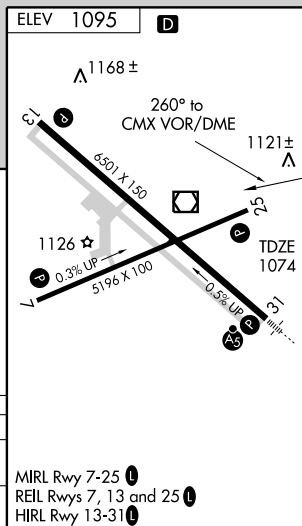
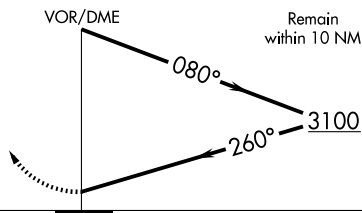
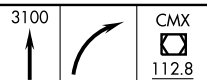
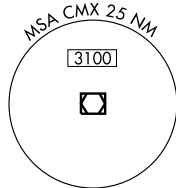
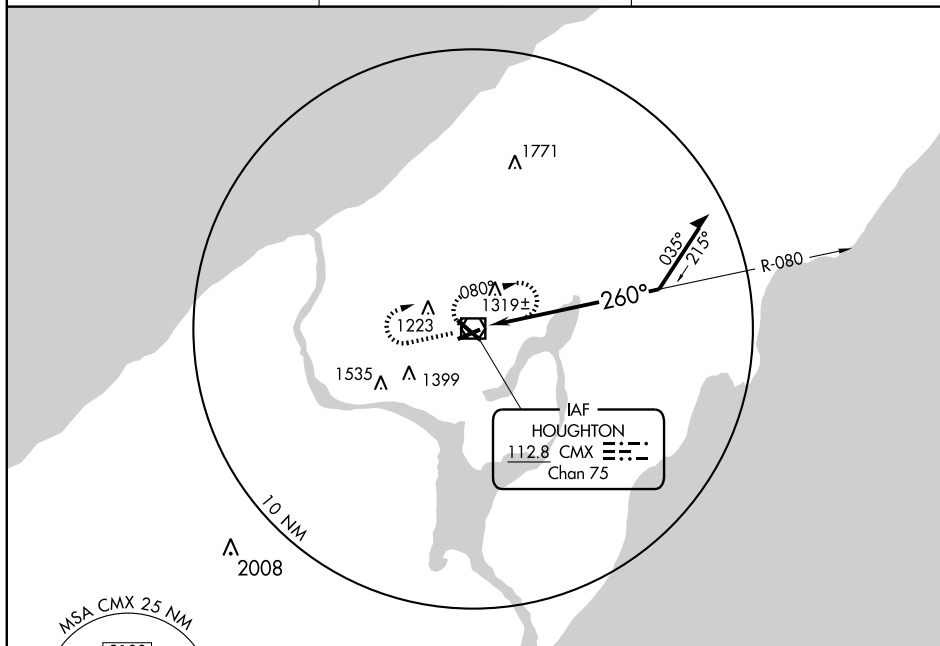


MISSED APPROACH: Climb to 3100, then right turn direct CMX VOR/DME and hold.

ASOS  
125.675

MINNEAPOLIS CENTER  
127.2 379.1

UNICOM  
122.7 (CTAF) 0





CATEGORY	A	B	C	D
S-25	1620-1 546 (600-1)		1620-1½ 546 (600-1½)	1620 1¾ 546 (600-1¾)
CIRCLING	1620-1 525 (600-1)	1640-1 545 (600-1)	1640-1½ 545 (600-1½)	1780-2¼ 685 (700-2¼)

VOR RWY 25

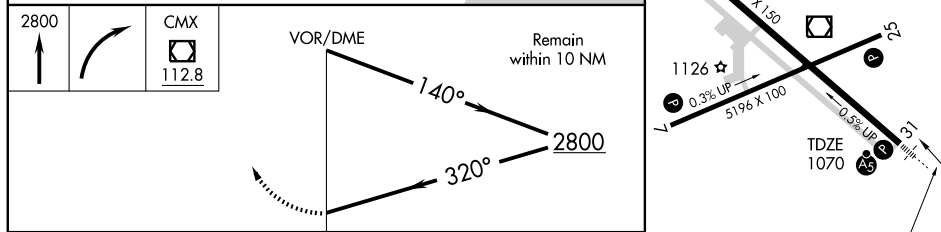
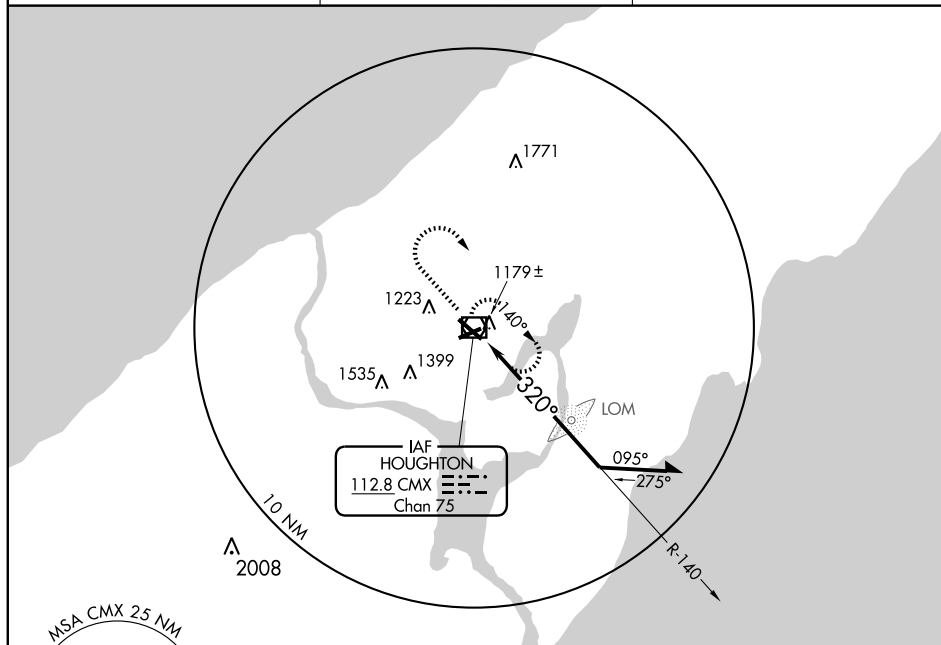
VOR/DME CMX	APP CRS	Rwy Idg	6501
<b>112.8</b>	<b>320°</b>	TDZE	1070
Chan 75		Apt Elev	1095

VOR RWY 31

HANCOCK / HOUGHTON COUNTY MEMORIAL (CMX)

	Request MRL Rwy 7-25 CTAF.		MISSED APPROACH: Climb to 2800, then right turn direct CMX VOR/DME and hold.
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ASOS <b>125.675</b>	MINNEAPOLIS CENTER <b>127.2 379.1</b>	UNICOM <b>122.7 (CTAF) 0</b>
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CATEGORY	A	B	C	D
S-31	1500-½	430 (500-½)	1500-¾	1500-1
			430 (500-¾)	430 (500-1)
CIRCLING	1620-1	1640-1	1640-1½	1780-2¼
	525 (600-1)	545 (600-1)	545 (600-1½)	685 (700-2¼)

## HANCOCK

HOUGHTON CO MEM (CMX) 4 NE UTC-5(-4DT) N47°10.11' W88°29.34'

1095 B S4 FUEL 100LL, JET A Class I, ARFF Index A NOTAM FILE CMX

RWY 13-31: H6501X150 (ASPH-GRVD) S-70, D-100, 2S-127, 2D-185 HIRL 0.5% up NW

RWY 13: REIL. PAPI(P4L)—GA 3.0° TCH 44'. Trees.

RWY 31: MALSR. PAPI(P4L)—GA 3.0° TCH 45'.

RWY 07-25: H5196X100 (ASPH-PFC) S-35, D-50 MIRL  
0.3% up NE

RWY 07: REIL. PAPI(P2L)—GA 3.0° TCH 30'. Trees.

RWY 25: REIL. PAPI(P4L)—GA 3.0° TCH 41'. Trees.

## RUNWAY DECLARED DISTANCE INFORMATION

RWY 07: TORA-5196 TODA-5196 ASDA-5196 LDA-5196

RWY 13: TORA-6501 TODA-6501 ASDA-6501 LDA-6501

RWY 25: TORA-5196 TODA-5196 ASDA-5196 LDA-5196

RWY 31: TORA-6501 TODA-6501 ASDA-6501 LDA-6501

**AIRPORT REMARKS:** Attended 0900-0500Z†. PAEW on arpt monitor CTAF. Frequent snow removal ops in progress various times Nov-Apr monitor CTAF. Airframe and power plant repairs avbl Apr 15 thru Nov 15. Arpt CLOSED to unscheduled air carrier ops with more than 30 passenger seats except PPR call arpt manager 906-482-3970. Deer and gulls on and invof arpt. General aviation acft parking permitted in front of air carrier terminal building. Contact Unicom for permission to park in front of terminal. General aviation acft parking on aprons lctd N and S of terminal building. Arpt has dual PCL. ACTIVATE HIRL Rwy 13-31, MIRL Rwy 07-25, PAPI Rwy 13, Rwy 31, Rwy 07, and Rwy 25, REIL Rwy 13, Rwy 07, and Rwy 25, MALSR Rwy 31 and Twy B—CTAF. Airfield guidance signs snow covered in winter. Ldg fee waived with fuel purchase for multi-engine acft only.

**WEATHER DATA SOURCES:** ASOS 125.675 (906) 482-4248. HIWAS 112.8 CMX.**COMMUNICATIONS:** CTAF/UNICOM 122.7

HANCOCK RCO 123.65 122.525 (GREEN BAY RADIO)

① MINNEAPOLIS CENTER APP/DEP CON 127.2

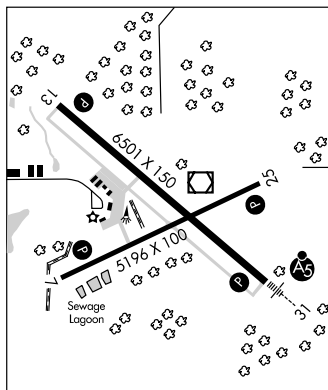
**AIRSPACE:** CLASS E svc continuous.**RADIO AIDS TO NAVIGATION:** NOTAM FILE CMX.

(L) VORW/DME 112.8 CMX Chan 75 N47°10.22' W88°29.12' at fld. 1072/2W. HIWAS.

DME unusable 315°-035° byd 30 NM blo 3500'.

GALEY NDB (MHW/LOM) 275 CM N47°06.94' W88°24.07' 313° 4.8 NM to fld. Unmonitored.

ILS/DME 110.3 I-CMX Chan 40 Rwy 31. Class IT. LOM GALEY NDB. LOC BC unusable byd 13° left and right of course. LOC BC and BC DME unusable byd 10 NM blo 2600'.



## HANLEY FLD (See MUNISING)

HARBOR SPRINGS (MGN) 3 E UTC-5(-4DT) N45°25.53' W84°54.80'

686 B FUEL 100LL, JET A NOTAM FILE MGN

RWY 10-28: H4157X75 (ASPH) S-22, D-30 MIRL

RWY 10: PAPI(P4R)—GA 3.5° TCH 25. Thld dspcd 445'. Pole.

RWY 28: (NSTD) PAPI(P4L)—GA 4.0° TCH 35. Thld dspcd 445'. Trees.

**AIRPORT REMARKS:** Attended 1300-dusk. Parachute Jumping. Birds and deer on and invof arpt. Rwy 28 +46' antenna 186' from dspcd thld 234' right. Noise abatement procedures; no turbojet/turboprop acft departures from 0400 to 1200Z†, no low flight over surrounding community, all acft departing to the W turn S over the water as soon as practical. ACTIVATE MIRL Rwy 10-28—CTAF. Lgts extinguish with 3 clicks during daytime ops. Landing fee waived with minimum fuel purchase.

**WEATHER DATA SOURCES:** AWOS-3 119.925 (231) 347-5231.**COMMUNICATIONS:** CTAF/UNICOM 122.8

① MINNEAPOLIS CENTER APP/DEP CON 134.6

**RADIO AIDS TO NAVIGATION:** NOTAM FILE PLN.

PELLSTON (L) VORTACW 111.8 PLN Chan 55 N45°37.84'

W84°39.85' 227° 16.2 NM to fld. 840/6W.

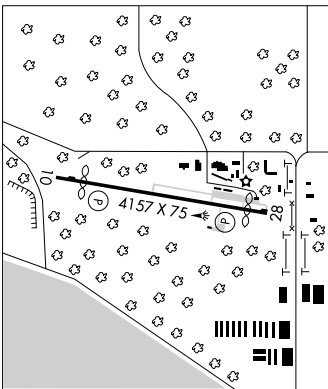
HIWAS.

**COMM/NAV/WEATHER REMARKS:** AWOS-3 Wind unreliable btn 260°-280°.

LAKE HURON

L-31B

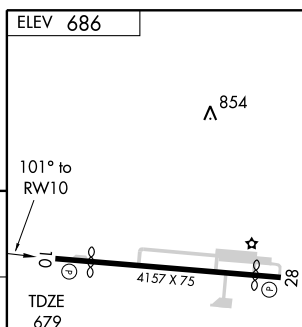
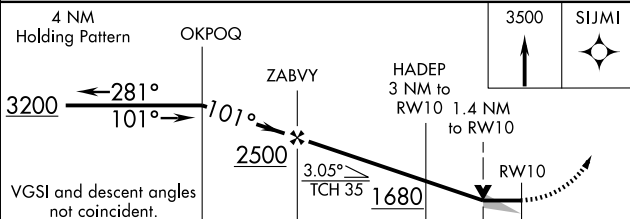
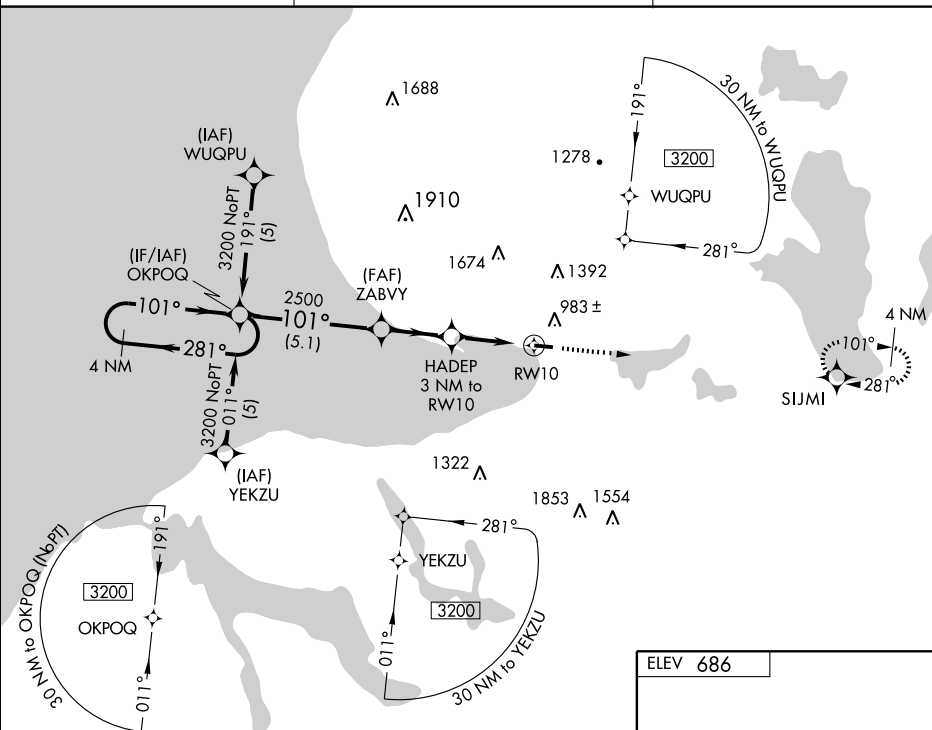
IAP



APP CRS  
**101°**Rwy Idg **3712**  
TDZE **679**  
Apt Elev **686****RNAV (GPS) RWY 10**  
HARBOR SPRINGS (MGN)

**▼** DME/DME RNP-0.3 NA. VDP NA when using Pellston altimeter setting. When local altimeter setting not received, use Pellston altimeter setting and increase all MDAs 40 feet.

**MISSED APPROACH:** Climb to 3500 direct SIJMI and hold.

AWOS-3  
**119.925**MINNEAPOLIS CENTER  
**134.6 354.05**UNICOM  
**122.8 (CTAF) 0**

CATEGORY	A	B	C	D
LNAV MDA	1240-1	561 (600-1)	NA	NA
CIRCLING	1380-1 694 (700-1)	1500-1¼ 814 (900-1¼)	NA	NA

MIRL Rwy 10-28 **0** \*



APP CRS **281°**  
 Rwy Idg **3712**  
 TDZE **686**  
 Apt Elev **686**

# RNAV (GPS) RWY 28

HARBOR SPRINGS (MGN)

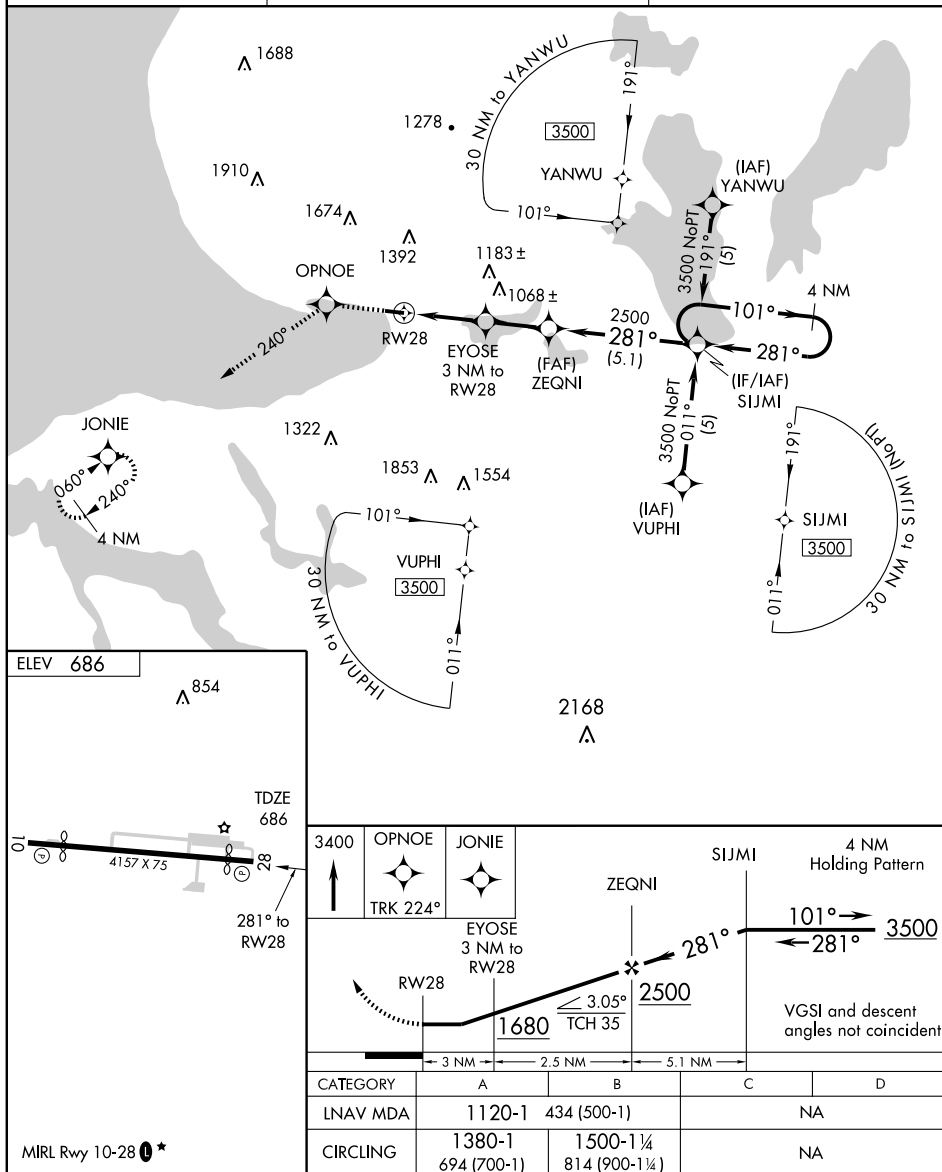
▼ DME/DME RNP -0.3 NA. Visibility reduction by helicopters NA.  
 ▲ When local altimeter setting not received, use Pellston altimeter setting and increase all MDAs 40 feet.

MISSED APPROACH: Climb to 3400 direct  
 OPNOE and via 240° track to JONIE and hold.

AWOS-3  
**119.925**

MINNEAPOLIS CENTER  
**134.6 354.05**

UNICOM  
**122.8 (CTAF) 0**



EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010

VORTAC PLN  
111.8  
Chan 55

APP CRS  
047°

Rwy Idg	TDZE	Apt Elev
1	100	100
2	100	100
3	100	100
4	100	100
5	100	100
6	100	100
7	100	100
8	100	100
9	100	100
10	100	100
11	100	100
12	100	100
13	100	100
14	100	100
15	100	100
16	100	100
17	100	100
18	100	100
19	100	100
20	100	100
21	100	100
22	100	100
23	100	100
24	100	100
25	100	100
26	100	100
27	100	100
28	100	100
29	100	100
30	100	100
31	100	100
32	100	100
33	100	100
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48	100	100
49	100	100
50	100	100
51	100	100
52	100	100
53	100	100
54	100	100
55	100	100
56	100	100
57	100	100
58	100	100
59	100	100
60	100	100
61	100	100
62	100	100
63	100	100
64	100	100
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69	100	100
70	100	100
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77	100	100
78	100	100
79	100	100
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84	100	100
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87	100	100
88	100	100
89	100	100
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92	100	100
93	100	100
94	100	100
95	100	100
96	100	100
97	100	100
98	100	100
99	100	100
100	100	100

N/A  
N/A  
686

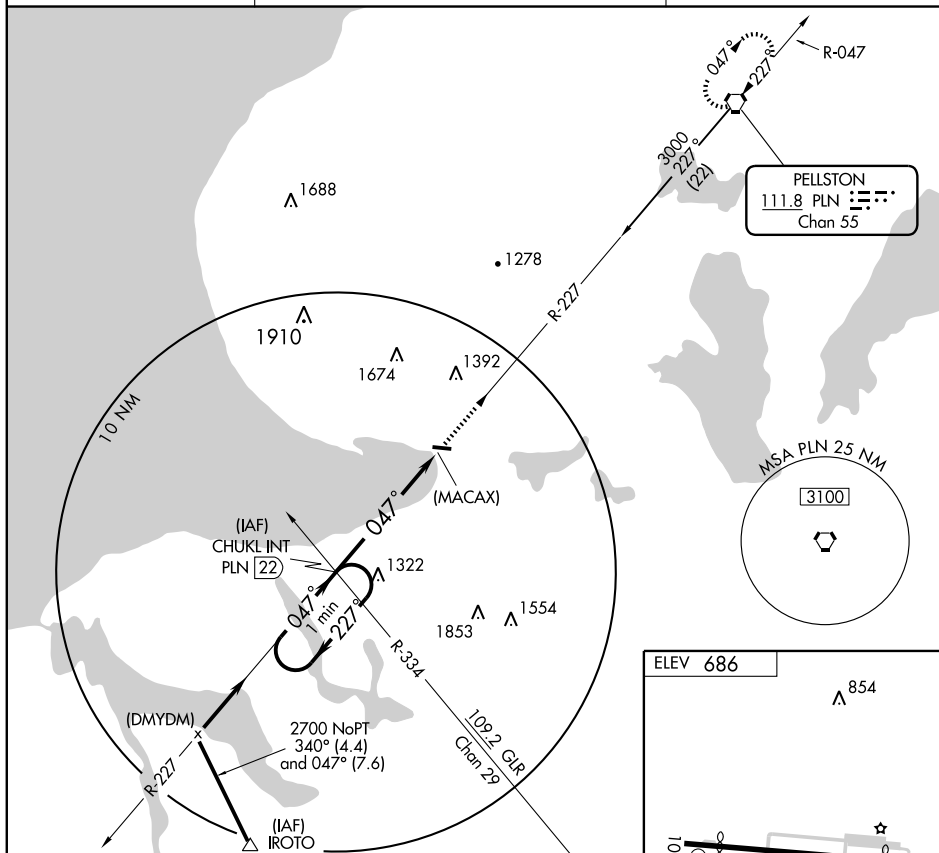
## VOR or GPS-A

<b>T</b>	Use Pellston altimeter setting.
<b>A NA</b>	Procedure not authorized at night.

**MISSED APPROACH:** Climb to 3000 direct PLN VORTAC and hold.

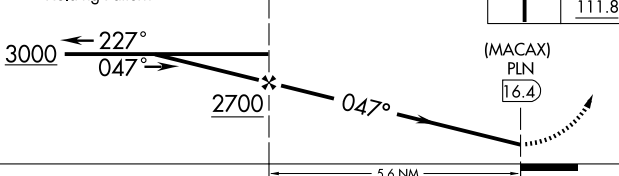
AWOS-3  
119.925

MINNEAPOLIS CENTER  
134.6 354.05

UNICOM  
122.8 (CTAF) **L**

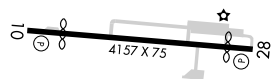
One Minute  
Holding Pattern

CHUKL INT  
PLN 22



ELEV 686

854



047° 5.6 NM

MIRL Rwy 10-28 **L**★

CATEGORY	A	B	C
CIRCLING	1660-1¼ 968 (1000-1¼)	1660-1½ 968 (1000-1½)	NA

FAF to MAP 5.6 NM					
Knots	60	90	120	150	180
Min:Sec	5:36	3:44	2:48	2:14	1:52

HARBOR SPRINGS, MICHIGAN

Amdt 1A 10154

HARBOR SPRINGS (MGN)

VOR or GPS-A

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1. 23 SEP 2010 to 21 OCT 2010

**HASTINGS** (9D9) 3 W UTC-5(-4DT) N42°39.81' W85°20.78'

CHICAGO

801 B FUEL 100LL TPA-1601(800) NOTAM FILE LAN

L-281

RWY 12-30: H3900X75 (ASPH) S-20 MIRL

IAP

RWY 12: REIL. PAPI(P4R)—GA 4.0°. TCH 25'. Trees.

RWY 30: REIL. PAPI(P4L)—GA 4.0° TCH 25'. Tree.

RWY 09-27: 2400X170 (TURF)

RWY 09: Thld displcd 185'. Trees.

RWY 27: Thld displcd 393'. Trees.

RWY 18-36: 1962X200 (TURF)

RWY 18: Trees. RWY 36: Tree.

AIRPORT REMARKS: Attended irregularly. Birds on and invof arpt.

ACTIVATE MIRL Rwy 12-30; REILS Rwy 12 and Rwy 30 and PAPI

Rwy 12 and Rwy 30—CTAF. Rwy 09-27 and Rwy 18-36 marked with yellow cones.

COMMUNICATIONS: CTAF/UNICOM 123.075.

① GRAND RAPIDS APP/DEP CON 128.4 (1030-0500Z)

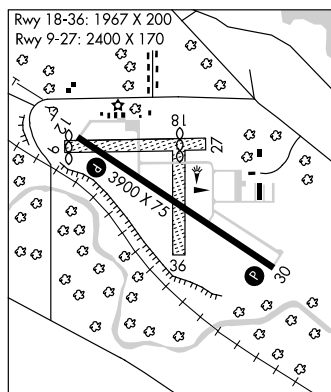
① CHICAGO CENTER APP/DEP CON 128.5 (0500-1030Z)

RADIO AIDS TO NAVIGATION: NOTAM FILE GRR.

GRAND RAPIDS (H) VOR/DME 115.95 GRR Chan

106(Y) N42°47.20' W 85°29.82' 142° 10 NM to fld.

803/4W. DME unmonitored.

**HAT FIELD** (See NUNICA)**HESEL****ALBERT J. LINDBERG** (5Y1) 2 N UTC-5(-4DT) N46°02.15' W84°25.19'

LAKE HURON

760 B NOTAM FILE GRB

L-31B

RWY 09-27: H3700X60 (ASPH) MIRL

RWY 09: PAPI(P2L)—GA 4.0° TCH 40'. Thld displcd 200'. Trees.

RWY 27: PAPI(P2L)—3.5° TCH 25'. Trees.

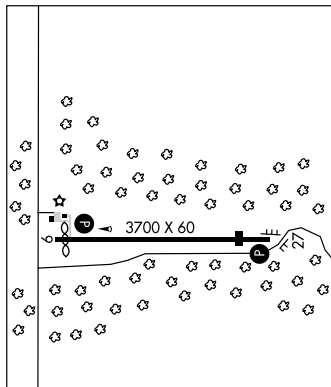
AIRPORT REMARKS: Attended Mon-Fri 1400-2200Z. Arpt manager after hour 1-906-298-0566. ACTIVATE MIRL Rwy 09-27 and PAPI Rws 09 and 27—CTAF.

COMMUNICATIONS: CTAF 122.9

RADIO AIDS TO NAVIGATION: NOTAM FILE PLN.

PELLSTON (L) VORTACW 111.8 PLN Chan 55 N45°37.84'

W84°39.85' 029° 26.4 NM to fld. 840/6W. HIWAS.

**HIGHLAND****PONDEROSA HELIPORT** (13D) 2W UTC-5(4DT) N42°37.75' W83°40.99'

DETROIT

1017 NOTAM FILE LAN

COPTER

HELIPAD H1: H18X18(CONC)

HELIPORT REMARKS: Unattended. Helipad H1 perimeter lgts. ACTIVATE H1 perimeter lgts and VASI-123.025.

COMMUNICATIONS: CTAF 122.9

VOR/DME GRR  
**115.95**  
Chan **106 (Y)**

APP CRS  
**142°**

Rwy Idg  
TDZE  
Apt Elev  
**3900**  
**797**  
**801**

**VOR RWY 12**  
HASTINGS (9D9)

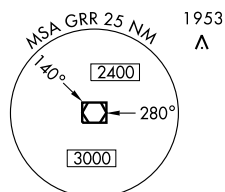
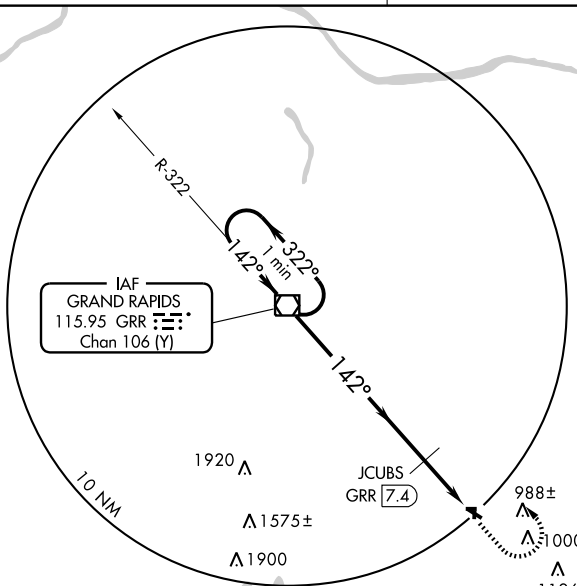


Use Grand Rapids altimeter setting.

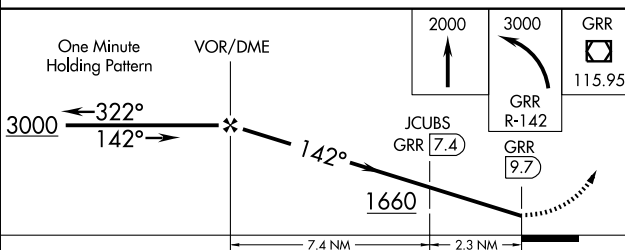
MISSED APPROACH: Climb to 2000, then climbing left turn to 3000 via GRR R-142 to GRR VOR/DME and hold.

GRAND RAPIDS APP CON\*  
**128.4 257.6**

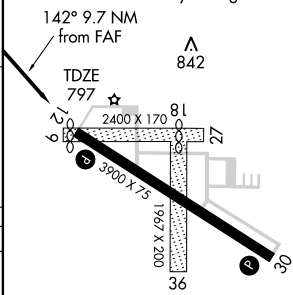
UNICOM  
**123.075 (CTAF) 0**



△ 1956



ELEV 801 Rwy 9 Idg 2215'  
Rwy 18 Idg 1967'  
Rwy 27 Idg 2007'



CATEGORY	A	B	C	D
S-12	1660-1 863 (900-1)	1660-1¼ 863 (900-1¼)	1660-2½ 863 (900-2½)	NA
CIRCLING	1660-1 859 (900-1)	1660-1¼ 859 (900-1¼)	1660-2½ 859 (900-2½)	NA
JCUBS DME MINIMUMS				
S-12	1340-1 543 (600-1)	1340-1½ 543 (600-1½)	NA	
CIRCLING	1340-1 539 (600-1)	1340-1½ 539 (600-1½)	NA	

MIRL Rwy 12-30 <b>L</b>					
REIL Rwy 12 and 30 <b>L</b>					
FAF to MAP 9.7 NM					
Knots	60	90	120	150	180
Min:Sec	9:42	6:28	4:51	3:53	3:14

**HILLMAN** (Y95) 2 NW UTC-5(-4DT) N45°04.98' W83°56.04'

LAKE HURON

850 NOTAM FILE LAN

L-31C

RWY 04-22: H3400X60 (ASPH) MIRL

RWY 04: Trees. RWY 22: Thld dsplcd 760'. Trees.

RWY 18-36: 2800X150 (TURF)

RWY 18: Thld dsplcd 1400'. Trees. RWY 36: Tree.

**AIRPORT REMARKS:** Attended irregularly. Rwy 18-36 surface rough and moderately rolling, not mowed. Snow removal second priority, confirm arpt condition before arrival. Rwy 18-36 marked with 3' yellow cones. ACTIVATE MIRL Rwy 04-22—CTAF.

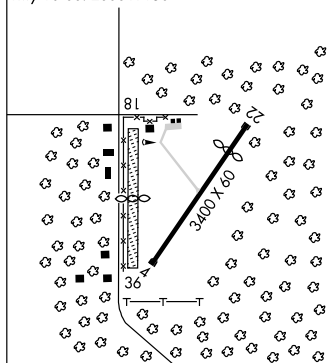
**COMMUNICATIONS:** CTAF 122.9

**RADIO AIDS TO NAVIGATION:** NOTAM FILE APN.

ALPENA (L) VORTAC 108.8 APN Chan 25 N45°04.97'

W83°33.42' 277° 16.0 NM to fld. 677/7W. HIWAS.

Rwy 18-36: 2800 X 150



**HILLSDALE MUNI** (JYM) 3 E UTC-5(-4DT) N41°55.28' W84°35.15'

DETROIT

1182 B S4 FUEL 100LL, JET A NOTAM FILE JYM

L-28J

RWY 10-28: H4000X75 (ASPH) S-16 MIRL 0.5% up E

IAP

RWY 10: Tree.

RWY 28: REIL. PAPI(P4L)—GA 3.0° TCH 34'. Trees.

**AIRPORT REMARKS:** Attended Nov-Mar 1300-2300Z†, Apr-Oct 1300-0200Z†. Rwy 28 PAPI OTS indef.

**WEATHER DATA SOURCES:** AWOS-3 121.025 (517) 437-5638.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

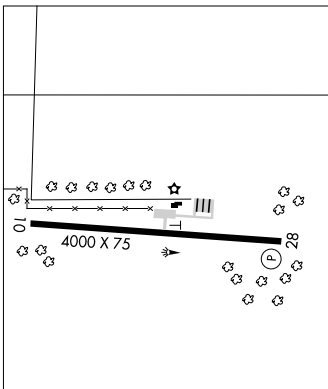
LITCHFIELD RCO 122.1R, 111.2T (LANSING RADIO)

® TOLEDO APP/DEP CON 134.35

**RADIO AIDS TO NAVIGATIONS:** NOTAM FILE LAN.

LITCHFIELD (L) VOR/DME 111.2 LFD Chan 49 N42°03.75'

W84°45.91' 141° 11.7 NM to fld. 1040/05W.



**HIRAM CURE** (See SUNFIELD)

**HOFFMAN'S BLACK MOUNTAIN AERODROME** (See Cheboygan)

**HOLLAND** N42°47.79' W86°09.45'. NOTAM FILE LAN.

CHICAGO

NDB (MHW) 233 HLM at Park Township. NDB unusable byd 5.5 NM.

L-28

VOR/DME LFD <b>111.2</b> Chan <b>49</b>	APP CRS <b>141°</b>	Rwy Ldg TDZE Apt Elev	<b>N/A</b> <b>N/A</b> <b>1182</b>
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# VOR or GPS-A

HILLSDALE MUNI (JYM)

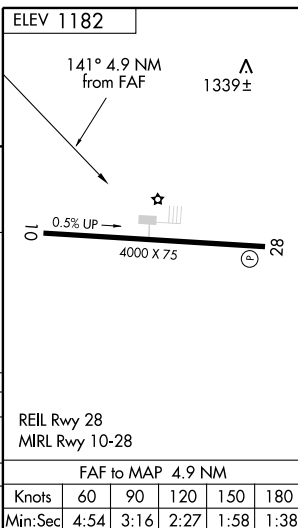
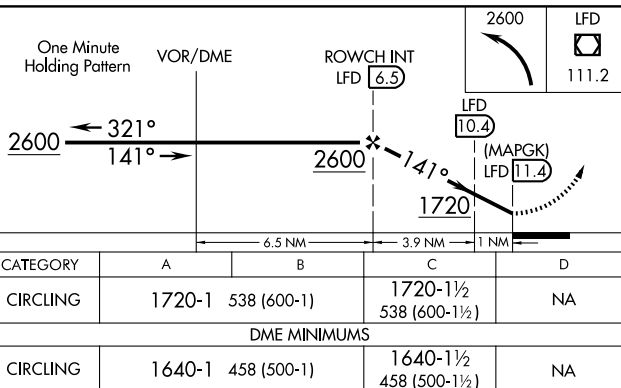
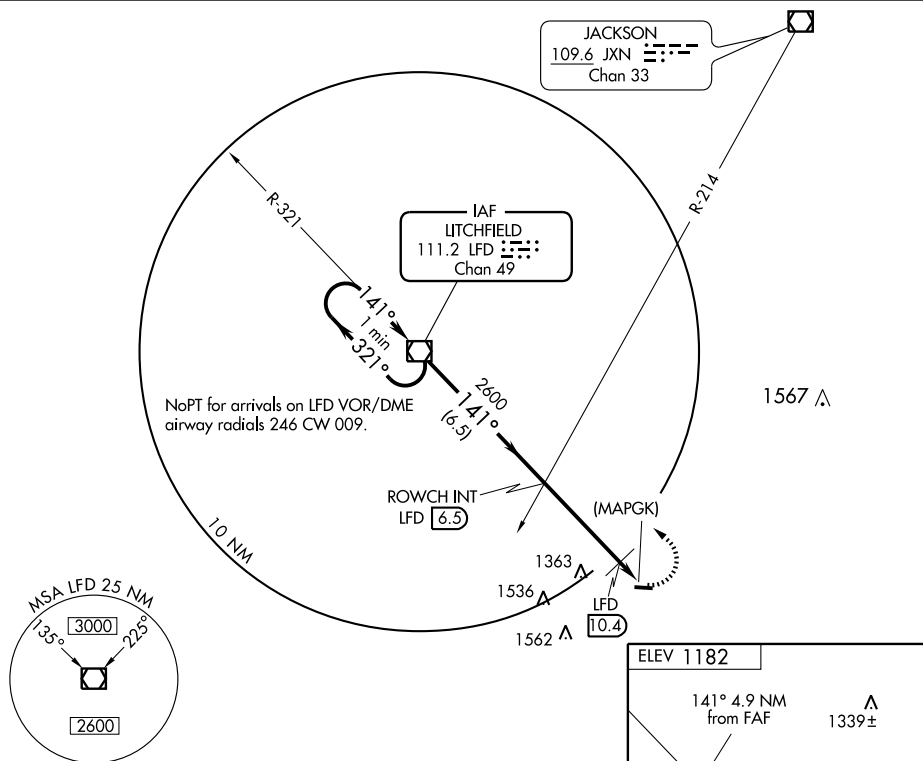


MISSED APPROACH: Climbing left turn to 2600 direct LFD VOR/DME and hold.

AWOS-3  
**121.025**

TOLEDO APP CON  
**134.35 317.55**

UNICOM  
**122.8** (CTAF)



## HOLLAND

**PARK TOWNSHIP** (HLM) 3 NW UTC-5(-4DT) N42°47.76' W86°09.72'

CHICAGO

603 B FUEL 100LL TPA-1403(800) NOTAM FILE LAN

**RWY 05-23:** H2999X50 (ASPH) MIRL (NSTD)

**RWY 05:** Thld dsplcd 725'. Road.

**RWY 23:** Thld dsplcd 1142'. Trees.

**RWY 12-30:** 2245X90 (TURF)

**RWY 12:** Thld dsplcd 1019'. Trees.

**RWY 30:** Thld dsplcd 820'. Trees.

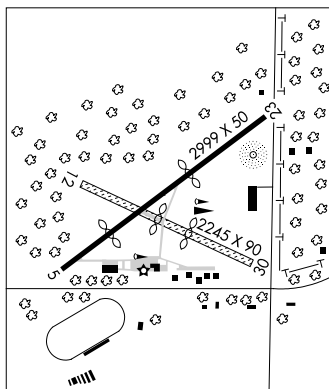
**AIRPORT REMARKS:** Attended irregularly. Rwy 12-30 CLOSED Nov 1 thru Mar 31 and when snow covered. Departure procedure: Rws 05 and 23 climb straight-out to 1200' MSL before turning. Rwy 12-30 and dsplcd thlds marked with 3' yellow cones. ACTIVATE NSTD MIRL Rwy 05-23—CTAF. Rwy 05-23 NSTD MIRL; lgs 24' from rwy edge.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

**PULLMAN RCO 122.1R 112.1T (LANSING RADIO)**

**RADIO AIDS TO NAVIGATION**

**HOLLAND NDB 233 HLM N42°47.79' W86°09.45'** at fld.



**TULIP CITY** (BIV) 2 S UTC-5(-4DT) N42°44.57' W86°06.47'

CHICAGO

698 B S4 FUEL 100LL, JET A OX 1, 2 NOTAM FILE BIV

**RWY 08-26:** H6002X100 (ASPH-GRVD) S-75, D-160, 2D-175 HIRL

**RWY 08:** REIL. PAPI (P4L)—GA 3.0° TCH 40'. Rgt tfc.

**RWY 26:** REIL. MALSR. PAPI (P4L)—GA 3.0° TCH 33'. Trees.

**AIRPORT REMARKS:** Attended Mon-Fri 1100-0300Z†, Sat and Sun 1200-0200Z†. For arpt attendant other hrs and during emerg call 616-392-7831. Deer and birds on and invof arpt. Ldg fee. Ldg fee waived with minimum fuel purchase. HIRL Rwy 08-26 preselect low ints; to increase inst and ACTIVATE MALSR Rwy 26; REIL Rwy 08; PAPI Rwy 08 and Rwy 26—CTAF.

**WEATHER DATA SOURCES:** ASOS 119.025 (616) 394-0190

**COMMUNICATIONS:** CTAF/UNICOM 123.05

**PULLMAN RCO 122.1R, 112.1T (LANSING RADIO)**

Ⓡ **MUSKEGON APP/DEP CON 119.8 (1100-0400Z†)**

**MUSKEGON CLNC DEL 123.95**

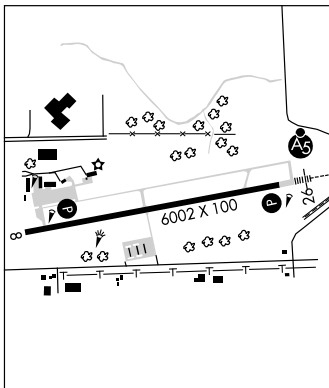
Ⓡ **CHICAGO CENTER APP/DEP CON 128.5 (0400-1100Z†)**

**RADIO AIDS TO NAVIGATION:** NOTAM FILE LAN.

**PULLMAN (H) VOR/DME 112.1 PMM Chan 58 N42°27.96'**

**W86°06.29' 360° 16.6 NM to fld. 640/00E.**

**ILS/DME 110.55 I-BIV Chan 42Y Rwy 26.**



**HOME ACRES SKY RANCH** (See LAKE CITY)

**HONEY ACRES** (See CLINTON)

**HOUGHTON CO MEM** (See HANCOCK)

## HOUGHTON LAKE HEIGHTS

**HOUGHTON LAKE STATE** (5Y2) 1 W UTC-5(-4DT) N44°19.75' W84°47.50'

LAKE HURON

1165 NOTAM FILE LAN

**RWY 16-34:** 2750X104 (TURF)

**RWY 16:** Thld dsplcd 550'. Brush.

**RWY 34:** Thld dsplcd 900'. Trees.

**AIRPORT REMARKS:** Attended irregularly. Snow removal irregular—confirm condition with arpt manager on 616-540-1324. Rwy 16 has 35' p-line on centerline 315' from thld. Rwy 16-24 marked with yellow cones.

**COMMUNICATIONS:** CTAF 122.9

**HOUGHTON LAKE** N44°21.53' W84°39.94' NOTAM FILE HTL.

LAKE HURON

(T) **VOR/DME 111.6 HTL Chan 53** at Roscommon Co-Blodgett Meml. 1145/5W. ASOS.

L-31C

**VOR/DME unmonitored dusk to 1300Z†.**

LOC/DME I-BIV <b>110.55</b> Chan <b>42</b> (Y)	APP CRS <b>264°</b>	Rwy Idg TDZE Apt Elev	<b>6002</b> <b>686</b> <b>698</b>
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## ILS or LOC/DME RWY 26

HOLLAND/ TULIP CITY (BIV)

**T** For inoperative MALSR, increase all S-ILS 26 visibility to 1. When local altimeter setting not received, use Muskegon altimeter setting and increase all DA 71 feet, all MDA 80 feet and S-ILS 26 Cats visibility  $\frac{1}{4}$  mile, and S-LOC 26 Cat C visibility  $\frac{1}{4}$  mile. For inoperative MALSR when using Muskegon altimeter setting, increase S-ILS 26 Cats visibility to  $\frac{1}{4}$ . VDP NA when using Muskegon altimeter setting.

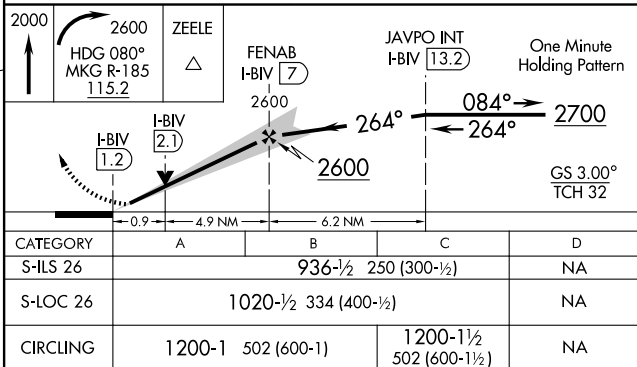
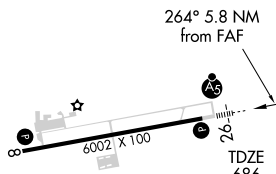
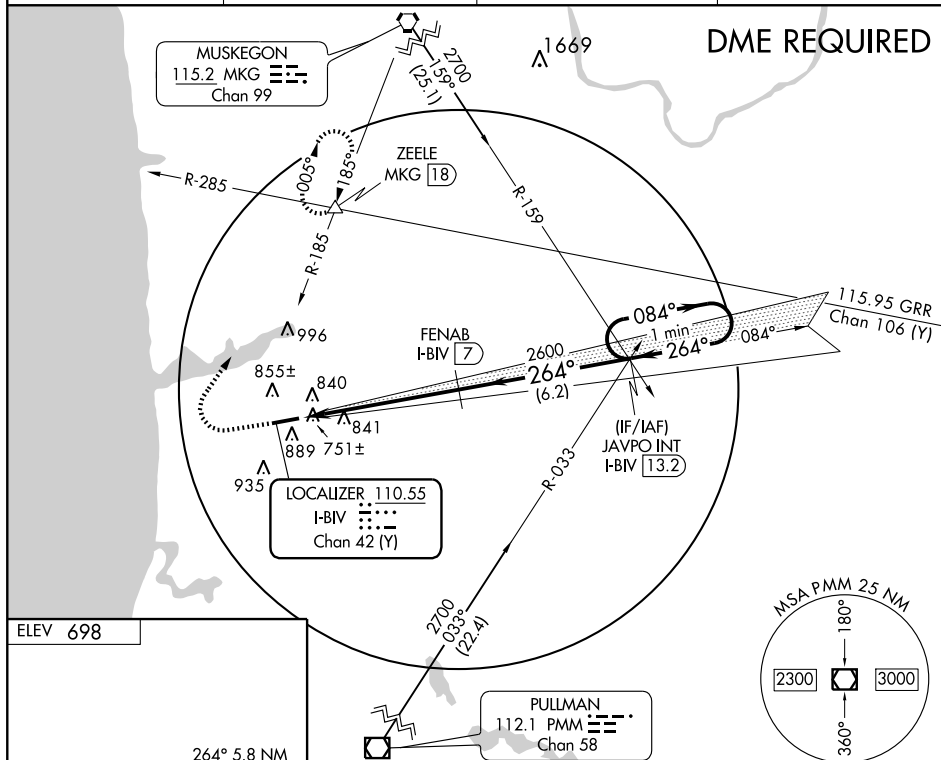
MALSR  
A5

**MISSED APPROACH:** Climb to 2000 then climbing right turn to 2600 via heading 080° and MKG R-185 to ZEELE INT/MKG 18 DME and hold.

ASOS  
119.025

MUSKEGON APP CON★  
119.8 339.1

MUSKEGON CLNC DEL  
**123.95**

UNICOM  
123.05 (CTAF) **L**

REIL Rwy 8 and 26 **L**  
HIRL Rwy 8-26 **L**

HOLLAND, MICHIGAN  
Amdt 2 09239

42°45'N - 86°06'W

HOLLAND/ TULIP CITY (BIV)

## ILS or LOC/DME RWY 26

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1. 23 SEP 2010 to 21 OCT 2010



APP CRS	Rwy Idg	<b>6002</b>
<b>084°</b>	TDZE	<b>698</b>
	Apt Elev	<b>698</b>

**RNAV (GPS) RWY 8**

HOLLAND/ TULIP CITY (BIV)

**▼** Visibility reduction by helicopters NA. DME/DME RNP-0.3 NA.  
**▲** If local altimeter setting not received, use Muskegon County altimeter setting and increase all MDAs 80 feet.

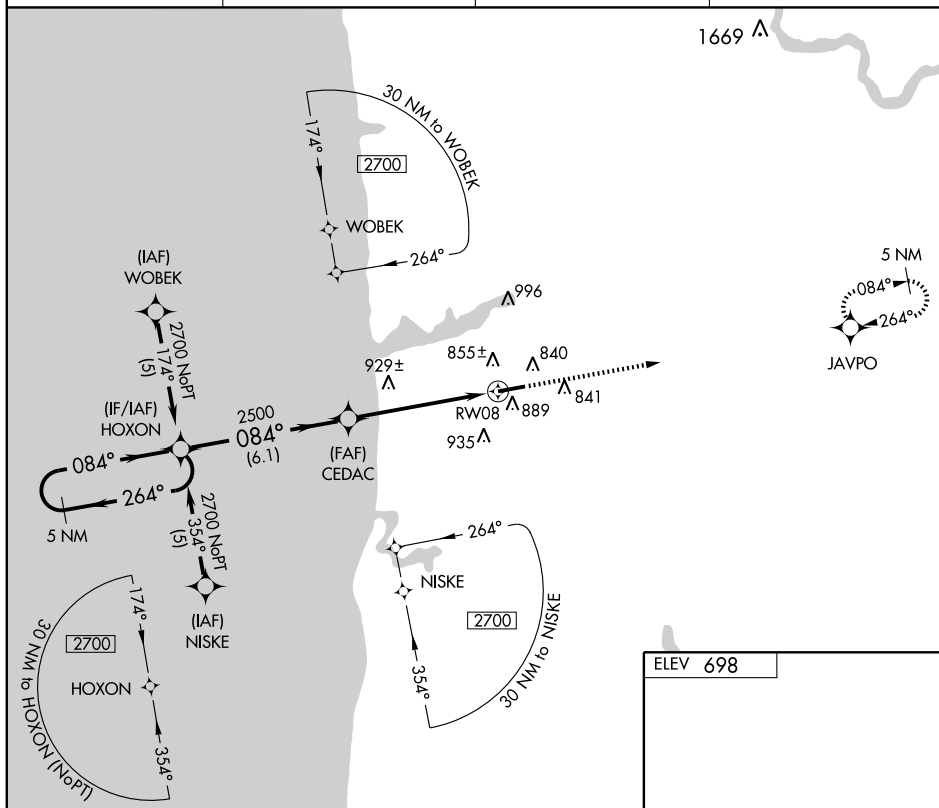
MISSED APPROACH: Climb to 3000 direct JAVPO and hold.

ASOS  
**119.025**

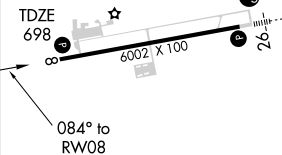
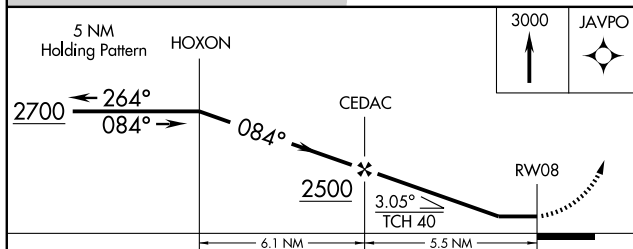
MUSKEGON APP CON ★  
**119.8 339.1**

MUSKEGON CLNC DEL  
**123.95**

UNICOM  
**123.05 (CTAF) 0**



ELEV 698



CATEGORY	A	B	C	D
LNAV MDA	1180-1	482 (500-1)	1180-1½ 482 (500-1½)	1180-1½ 482 (500-1½)
CIRCLING	1200-1	502 (600-1)	1200-1½ 502 (600-1½)	1260-2 562 (600-2)

REIL Rwy 8 and 26 **0**  
 HIRL Rwy 8-26 **0**

WAAS CH <b>53402</b> <b>W26A</b>	APP CRS <b>264°</b>	Rwy Idg <b>6002</b> TDZE <b>686</b> Apt Elev <b>698</b>
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## RNAV (GPS) RWY 26

HOLLAND/ TULIP CITY (BIV)

**▼** For inoperative MALSR, increase LPV all Cats visibility to 1. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. **▲** VDP and Baro-VNAV NA when using Muskegon altimeter setting. When local altimeter setting not received, use Muskegon altimeter setting and increase all DA 71 feet and all MDA 80 feet; increase all LPV, LNAV-VNAV and LNAV Cat C visibility ¼ mile. For inoperative MALSR, when using Muskegon altimeter setting, increase LPV all Cats visibility to 1¼.

MALSR  
A5

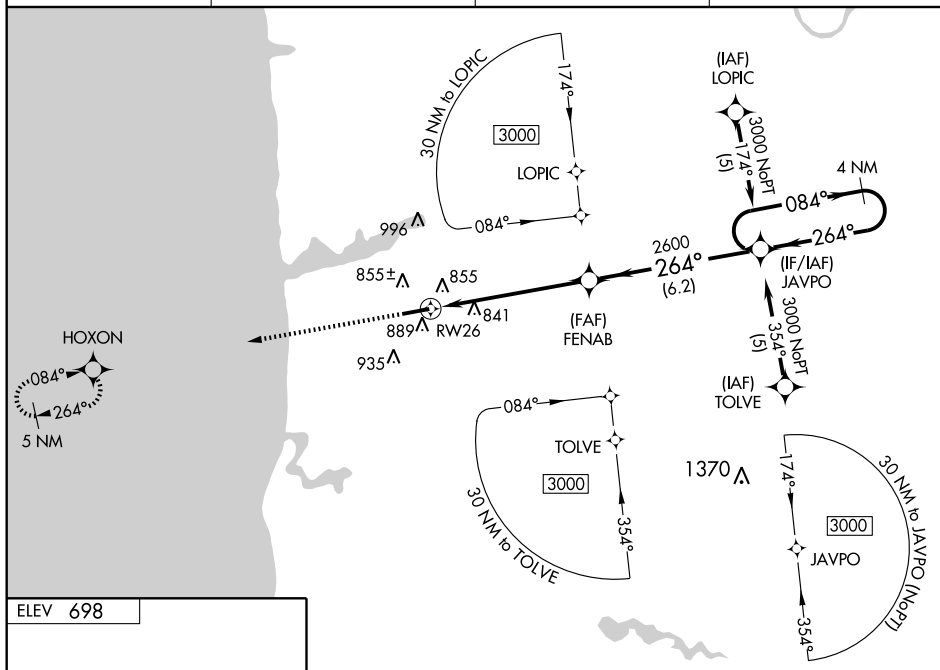
**MISSED APPROACH:**  
Climb to 2700 direct  
HOXON and hold.

ASOS  
**119.025**

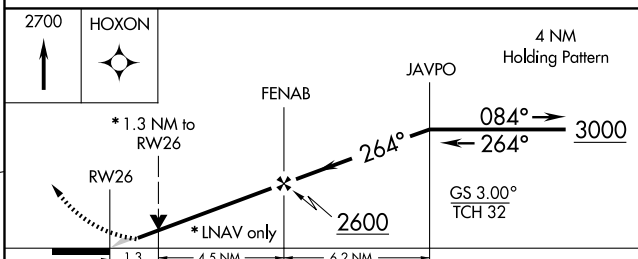
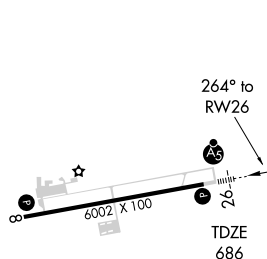
MUSKEGON APP CON ★  
119.8 339.1

MUSKEGON CLNC DEL  
**123.95**

UNICOM  
123.05 (CTAF) **L**



ELEV 698



CATEGORY	A	B	C	D
LPV DA	951-½ 265 (300-½)			NA
LNAV/ VNAV DA	1175-1¼ 489 (500-1¼)			NA
LNAV MDA	1140-½	454 (500-½)	1140-¾ 454 (500-¾)	NA
CIRCLING	1200-1	502 (600-1)	1200-1½ 502 (600-1½)	NA

REIL Rwy 8 and 26 **L**  
HIRL Rwy 8-26 **L**

HOLLAND, MICHIGAN  
Amdt 3 09239

42°45'N - 86°06'W

HOLLAND/ TULIP CITY (BIV)



RNAV (GPS) RWY 26

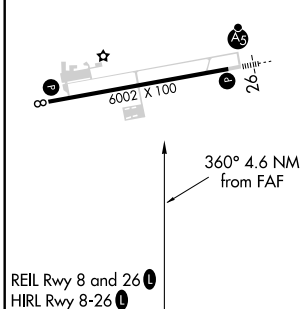
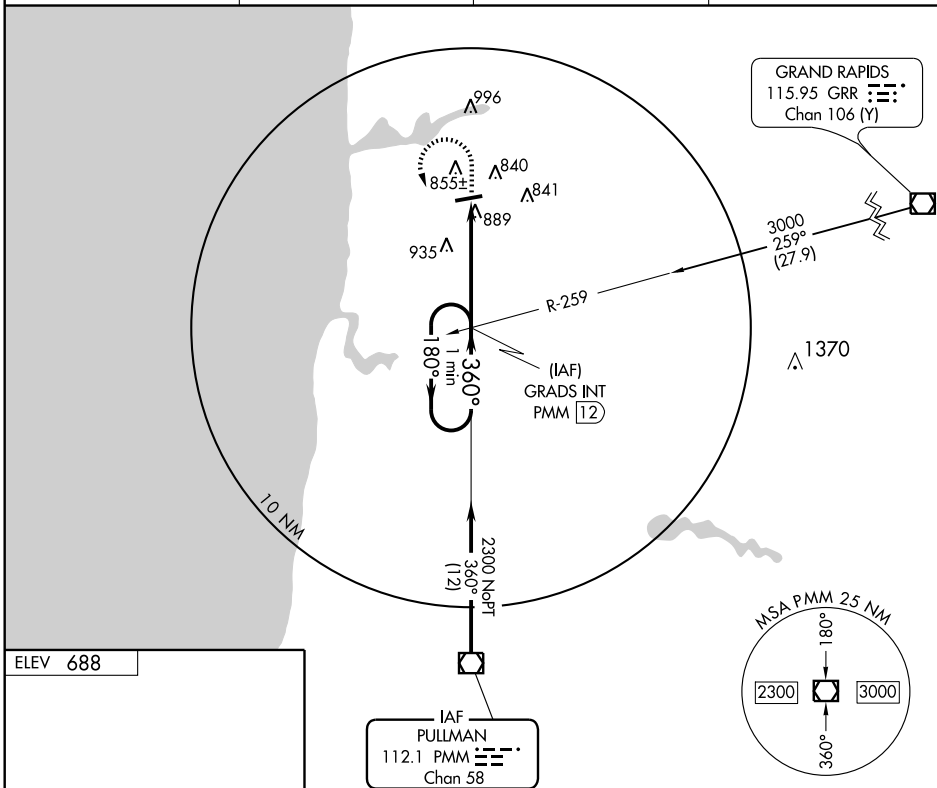
EC-1. 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010

VOR/DME PMM <b>112.1</b> Chan <b>58</b>	APP CRS <b>360°</b>	Rwy Idg TDZE Apt Elev	<b>N/A</b> <b>N/A</b> <b>688</b>
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VOR-A  
HOLLAND/ TULIP CITY (BIV)

  NA		MISSED APPROACH: Climb to 2300 then left turn via PMM R-360 to GRADS INT/PM 12 DME and hold.	
ASOS <b>119.025</b>	MUSKOGON APP CON ★ <b>119.8 339.1</b>	MUSKOGON CLNC DEL <b>123.95</b>	UNICOM <b>123.05 (CTAF) 0</b>



FAF to MAP 4.6 NM						CATEGORY	A	B	C	D
Knots	60	90	120	150	180	CIRCLING	1200-1	512 (600-1)	1200-1½ 512 (600-1½)	1240-2 552 (600-2)
Min:Sec	4:36	3:04	2:18	1:50	1:32					

**HOUGHTON LAKE****ROSCOMMON CO—BLODGETT MEML** (HTL) 5 NE UTC-5(-4DT) N44°21.59' W84°40.27'**LAKE HURON**

1150 B S4 FUEL 100LL, JET A NOTAM FILE HTL

L-31C

RWY 09-27: H4000X75 (ASPH) S-24 HIRL

IAP

RWY 09: REIL. PAPI(P4L)—GA 4.0° TCH 32'. Trees.

RWY 27: REIL. PAPI(P4R)—GA 3.5° TCH 32'. Trees.

RWY 18-36: 2200X100 (TURF)

RWY 18: Thld displcd 200'. Trees.

RWY 36: Thld displcd 200'. Trees.

**AIRPORT REMARKS:** Attended 1300-2230Z†. Arpt unattended Christmas and Thanksgiving. Rwy 18-36 CLOSED when snow covered except for ski-equipped acft. Animals on and invof arpt. Rwy 18-36 marked with 3' yellow cones. HIRL Rwy 09-27 preset on low ints dusk-0200Z†; after 0200Z† ACTIVATE—CTAF. To increase ints and ACTIVATE REIL and PAPI Rwy 09 and 27—CTAF. 2203' MSL (883' AGL) twr 4.2 NM southwest of arpt.

**WEATHER DATA SOURCES:** ASOS 111.6 HTL (989) 366-4825.**COMMUNICATIONS:** CTAF/UNICOM 122.8

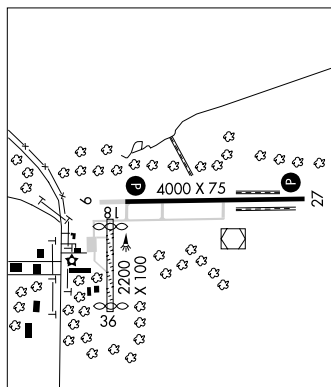
WEST BRANCH RCO 122.35 (LANSING RADIO)

® MINNEAPOLIS CENTER APP/DEP CON 132.9

**RADIO AIDS TO NAVIGATION:** NOTAM FILE HTL.

HOUGHTON LAKE (T) VORW/DME 111.6 HTL Chan 53 N44°21.53'

W84°39.94' at fld. 1145/5W. ASOS.

**HOUGHTON LAKE STATE** (See HOUGHTON LAKE HEIGHTS)**HOWARD NIXON MEML** (See CHESANING)**HOWELL** N42°38.03' W83°59.26'. NOTAM FILE OZW.**DETROIT**

NDB (MHW) 243 OZW at Livingston Co Spencer J. Hardy.

L-28J

**HOWELL****AERONUT PARK BALLOON** (13M) 4 E UTC-5(-4DT) N42°36.25' W83°51.52'**DETROIT**

980 NOTAM FILE LAN

Not insp.

RWY B1: 900X250 (TURF)

**AIRPORT REMARKS:** Attended irregularly. Contact owner at 517-552-1236 when using for first time. Acft in the vicinity using Rwy 09-27 adjacent to the S at McKenzie's Landing (1MI5). No snow removal. Support vehicles be alert when driving on grass in spring and fall when wet due to possible soft areas.

**COMMUNICATIONS:** CTAF 122.9**LIVINGSTON CO SPENCER J. HARDY** (OZW) 3 NW UTC-5(-4DT) N42°37.77' W83°58.93'**DETROIT**

962 B S4 FUEL 100LL, JET A TPA-2001(1039) NOTAM FILE OZW

**COPTER**

RWY 13-31: H5002X100 (CONC-GRVD) S-100 HIRL 0.4% up NW

H-106, L-28J

RWY 13: MALSR. PAPI(P4L)—GA 3.0° TCH 47'. Trees.

IAP

RWY 31: REIL. PAPI(P4L)—GA 3.0° TCH 30'. Trees.

**AIRPORT REMARKS:** Attended Mon-Fri 1200-2200Z†, Sat-Sun 1300-1700Z†. For fuel after hrs phone 517-548-4945. Deer and birds on and invof arpt. HIRL Rwy 13-31 ops low ints dusk-0300Z†; to increase ints and ACTIVATE after 0300Z†—CTAF. ACTIVATE REIL Rwy 31 and MALSR Rwy 13—CTAF. PAPI Rwy 13 and Rwy 31 ops dawn-dusk, thereafter—CTAF.

**WEATHER DATA SOURCES:** AWOS-3 118.875 (517) 546-4450.**COMMUNICATIONS:** CTAF/UNICOM 123.0

® DETROIT APP/DEP CON 127.5 CLNC DEL 121.725

GCO 121.725 (DETROIT METRO CLNC and FLIGHT SERVICES)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE LAN.

SALEM (L) VORTAC 114.3 SVM Chan 90 N42°24.53'

W83°35.65' 311° 21.7 NM to fld. 950/3W.

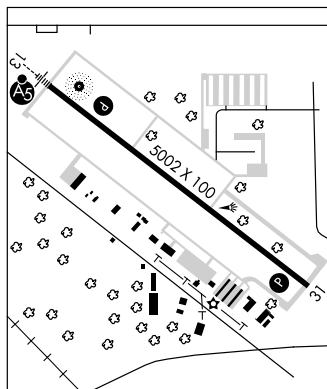
HOWELL NDB (MHW) 243 OZW N42°38.03' W83°59.26' at fld.

NOTAM FILE OZW.

ILS/DME 108.55 I-OGO Chan 22Y Rwy 13. ILS/DME

unmonitored.

**COMM/NAV/WEATHER REMARKS:** For CLNC DEL key frequency 121.725 4 times. To contact FSS key frequency 121.725 6 times; one second on/one second off; monitor 121.725 while electronic equipment dials Detroit CLNC DEL/Lansing FSS.



APP CRS	Rwy Idg	<b>4000</b>
<b>094°</b>	TDZE	<b>1150</b>
	Apt Elev	<b>1150</b>

## RNAV (GPS) RWY 9

HOUGHTON LAKE/ROSCOMMON COUNTY-BLODGETT MEMORIAL (HTL)

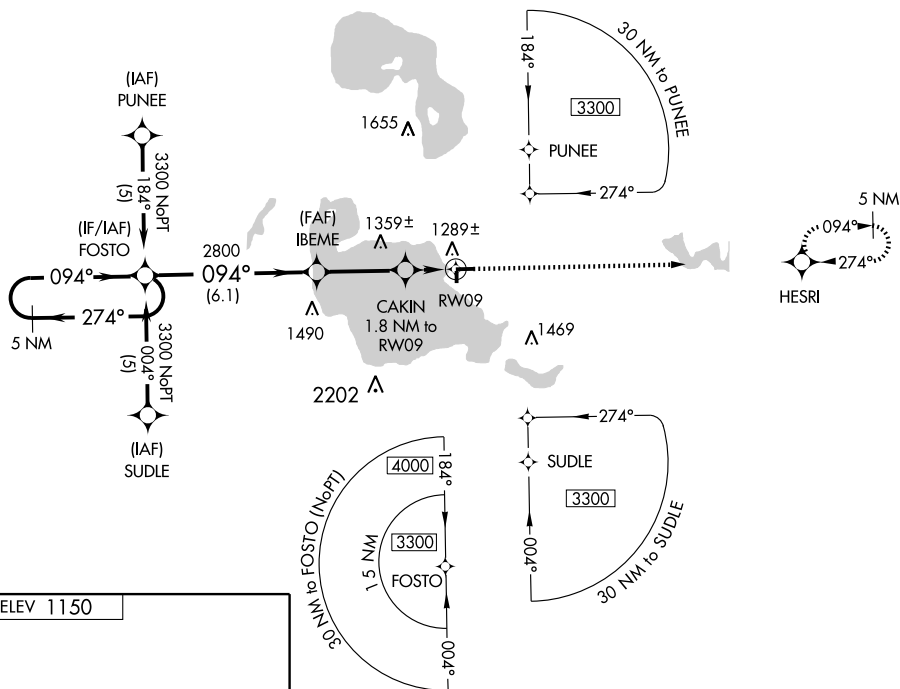


DME/DME RNP-0.3 NA. Circling NA at night.  
 Visibility reduction by helicopters NA.  
 If local altimeter setting not received, use Gaylord  
 altimeter setting and increase all MDAs 120 feet.

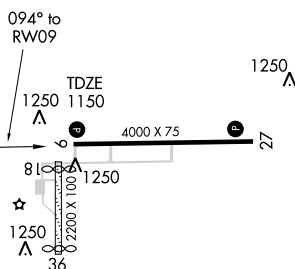
**MISSED APPROACH:** Climb to 3300 direct HESRI and hold.

ASOS  
111.6

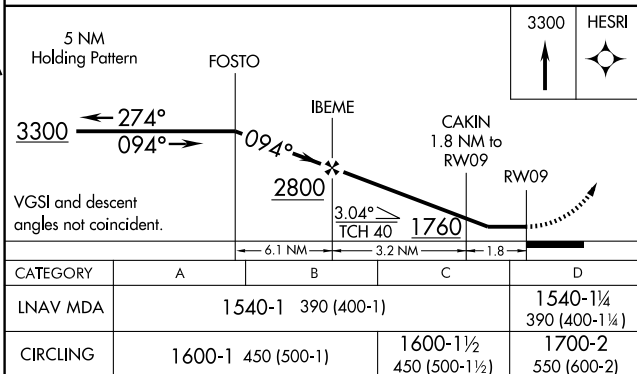
MINNEAPOLIS CENTER  
132.9 398.9

UNICOM  
122.8 (CTAF) **L**

ELEV 1150



HIRL Rwy 9-27 **L**  
REIL Rwy 9 and 27 **L**



HOUGHTON LAKE, MICHIGAN  
Amdt 1 09071

HOUGHTON LAKE/ROSCOMMON COUNTY-BLODGETT MEMORIAL (HTL)  
44°22'N 84°40'W      BNAV / (GPS) BNAV 0

44°22'N - 84°40'W

## RNAV (GPS) RWY 9

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1. 23 SEP 2010 to 21 OCT 2010

APP CRS	Rwy Idg	<b>4000</b>
<b>274°</b>	TDZE	<b>1145</b>
	Apt Elev	<b>1150</b>

HOUGHTON LAKE/

RNAV (GPS) RWY 27

ROSCOMMON COUNTY-BLODGETT MEMORIAL (HTL)



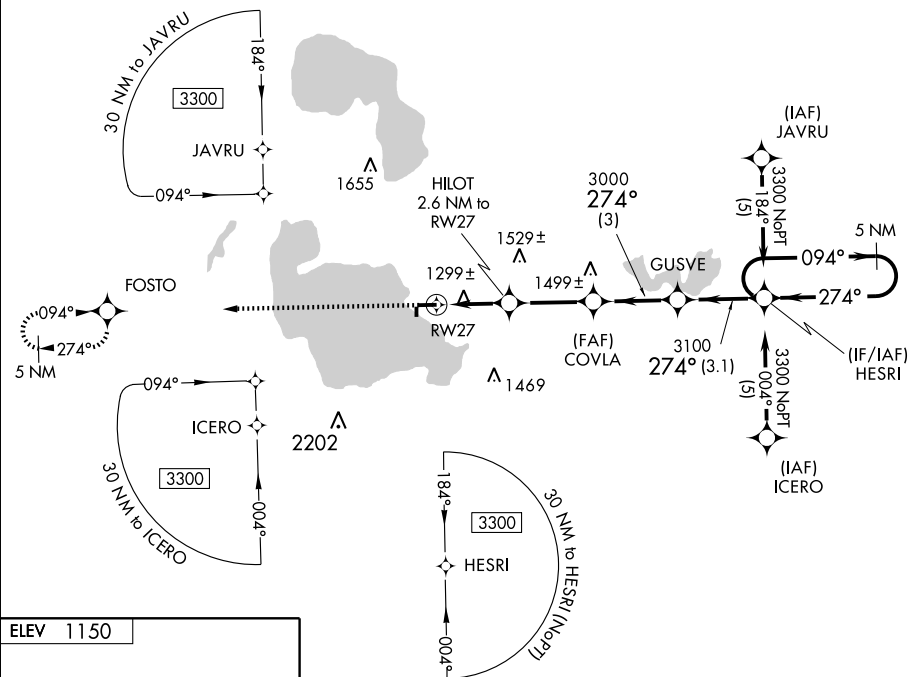
DME/DME RNP-0.3 NA. Circling NA at night.  
 Visibility reduction by helicopters NA.  
 If local altimeter setting not received, use Gaylord  
 altimeter setting and increase all MDAs 120 feet.

**MISSED APPROACH:** Climb to 3300 direct FOSTO and hold.

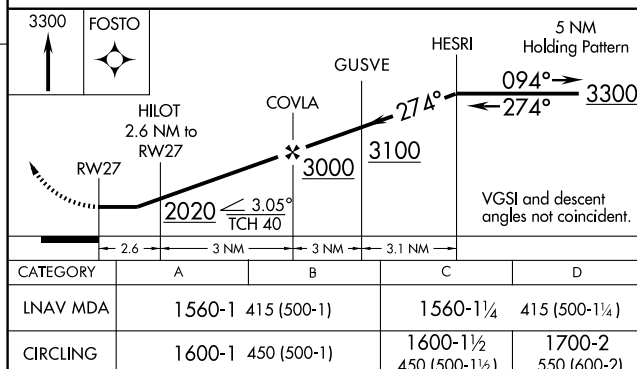
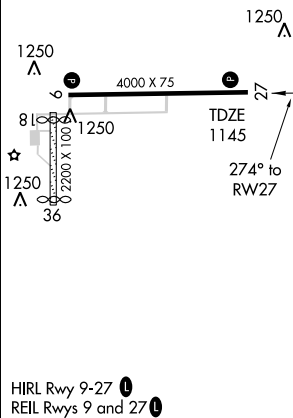
ASOS  
111.6

MINNEAPOLIS CENTER  
132.9 398.9

UNICOM  
122.8 (CTAF) **L**



ELEV 1150



HOUGHTON LAKE, MICHIGAN  
Orig 09071

HOUGHTON LAKE/ROSCOMMON COUNTY-BLODGETT MEMORIAL (HTL)  
44°22'N - 84°40'W      **BN1AV (CPS) BW1V 27**

RNAV (GPS) RWY 27

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1. 23 SEP 2010 to 21 OCT 2010

VOR/DME HTL  
**111.6**  
Chan **53**

APP CRS  
**103°**

Rwy Idg  
TDZE  
Apt Elev  
**4000**  
**1150**  
**1150**

HOUGHTON LAKE/  
ROSCOMMON COUNTY-BLODGETT MEMORIAL (HTL)

**VOR RWY 9**

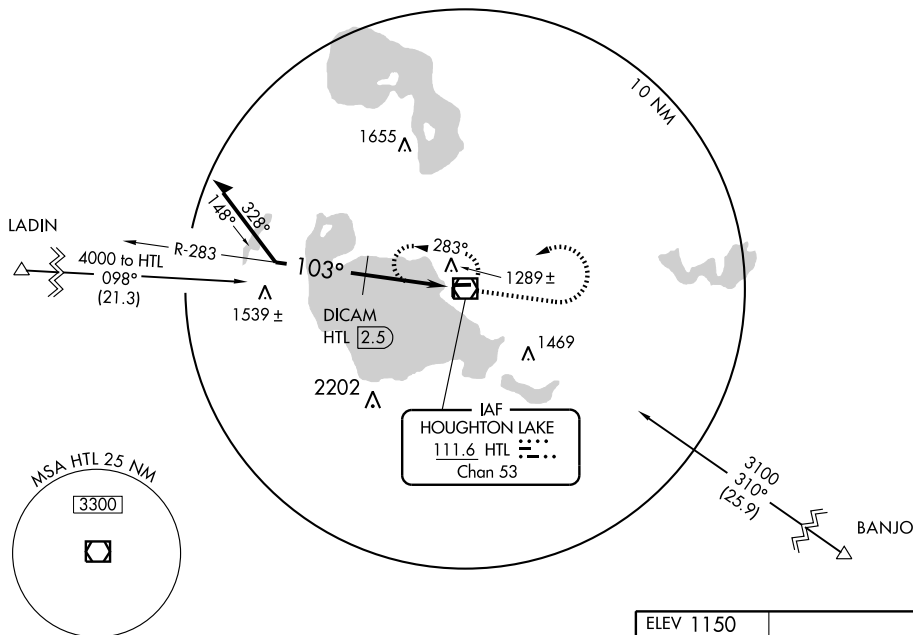
▼ If local altimeter setting not received, procedure NA.  
▲ NA Visibility reduction by helicopters NA.  
Circling NA at night.

MISSED APPROACH: Climb to 2000 then climbing  
left turn to 3000 direct HTL VOR/DME and hold.

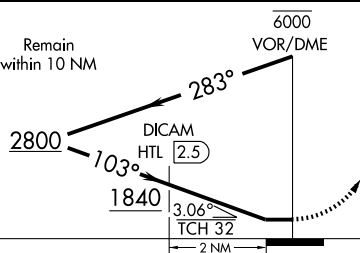
ASOS  
**111.6**

MINNEAPOLIS CENTER  
**132.9 398.9**

UNICOM  
**122.8** (CTAF) **0**



Remain  
within 10 NM

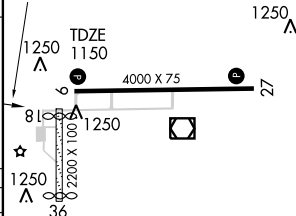


VGSI and descent angles  
not coincident.

CATEGORY	A	B	C	D
S-9	1840-1	690 (700-1)	1840-2 690 (700-2)	1840-2¼ 690 (700-2¼)
CIRCLING	1840-1	690 (700-1)	1840-2 690 (700-2)	1840-2¼ 690 (700-2¼)
DICAM FIX MINIMUMS (DME REQUIRED)				
S-9	1540-1	390 (400-1)		1540-1¼ 390 (400-1¼)
CIRCLING	1600-1	450 (500-1)	1600-1½ 450 (500-1½)	1700-2 550 (600-2)

ELEV 1150

103° to  
HTL  
VOR/DME



HIRL Rwy 9-27 **0**  
REIL Rwy 9 and 27 **0**

VOR/DME HTL  
**111.6**  
Chan **53**

APP CRS  
**262°**

Rwy Idg  
TDZE **1145**  
Apt Elev **1150**

HOUGHTON LAKE/

ROSCOMMON COUNTY-BLODGETT MEMORIAL (HTL)

**VOR RWY 27**

NA

If local altimeter setting not received, procedure NA.  
Visibility reduction by helicopters NA.  
Circling NA at night.

MISSED APPROACH: Climb to 2000 then climbing right turn to 3000 direct HTL VOR/DME and hold.

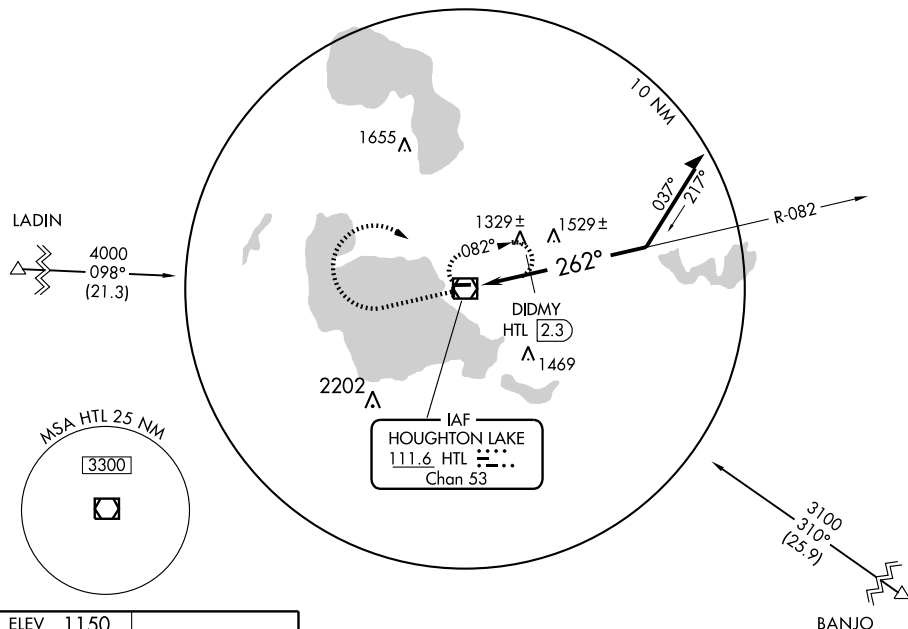
ASOS

**111.6**

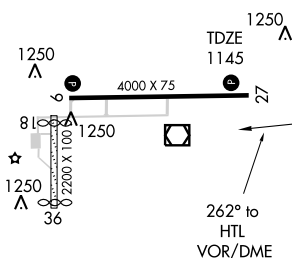
MINNEAPOLIS CENTER

**132.9 398.9**

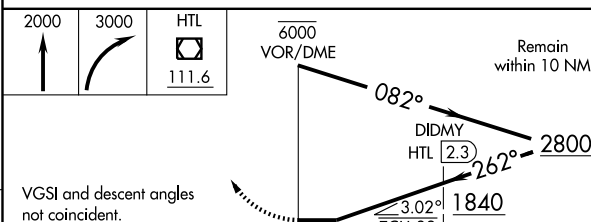
UNICOM

**122.8 (CTAF) 0**

ELEV 1150



HIRL Rwy 9-27 0  
REIL Rws 9 and 27 0



CATEGORY	A	B	C	D
S-27	1840-1 695 (700-1)		1840-2 695 (700-2)	1840-2 1/4 695 (700-2 1/4)
CIRCLING	1840-1 690 (700-1)		1840-2 690 (700-2)	1840-2 1/4 690 (700-2 1/4)
DIDMY FIX MINIMUMS (DME REQUIRED)				
S-27	1580-1 435 (500-1)		1580-1 1/4 435 (500-1 1/4)	1580-1 1/2 435 (500-1 1/2)
CIRCLING	1600-1 450 (500-1)		1600-1 1/2 450 (500-1 1/2)	1700-2 550 (600-2)

HOUGHTON LAKE, MICHIGAN

Amdt 3 09071

HOUGHTON LAKE/ROSCOMMON COUNTY-BLODGETT MEMORIAL (HTL)

44°22'N - 84°40'W

**VOR RWY 27**



## HOUGHTON LAKE

ROSCOMMON CO—BLODGETT MEML (HTL) 5 NE UTC-5(-4DT) N44°21.59' W84°40.27'

LAKE HURON

1150 B S4 FUEL 100LL, JET A NOTAM FILE HTL

L-31C

RWY 09-27: H4000X75 (ASPH) S-24 HIRL

IAP

RWY 09: REIL. PAPI(P4L)—GA 4.0° TCH 32'. Trees.

RWY 27: REIL. PAPI(P4R)—GA 3.5° TCH 32'. Trees.

RWY 18-36: 2200X100 (TURF)

RWY 18: Thld displcd 200'. Trees.

RWY 36: Thld displcd 200'. Trees.

**AIRPORT REMARKS:** Attended 1300-2230Z±. Arpt unattended Christmas and Thanksgiving. Rwy 18-36 CLOSED when snow covered except for ski-equipped acft. Animals on and invof arpt. Rwy 18-36 marked with 3' yellow cones. HIRL Rwy 09-27 preset on low ints dusk-0200Z±; after 0200Z± ACTIVATE—CTAF. To increase ints and ACTIVATE REIL and PAPI Rwy 09 and 27—CTAF. 2203' MSL (883' AGL) twr 4.2 NM southwest of arpt.

**WEATHER DATA SOURCES:** ASOS 111.6 HTL (989) 366-4825.**COMMUNICATIONS:** CTAF/UNICOM 122.8

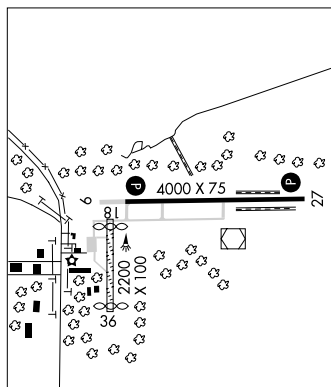
WEST BRANCH RCO 122.35 (LANSING RADIO)

® MINNEAPOLIS CENTER APP/DEP CON 132.9

**RADIO AIDS TO NAVIGATION:** NOTAM FILE HTL.

HOUGHTON LAKE (T) VORW/DME 111.6 HTL Chan 53 N44°21.53'

W84°39.94' at fld. 1145/5W. ASOS.



HOUGHTON LAKE STATE (See HOUGHTON LAKE HEIGHTS)

HOWARD NIXON MEML (See CHESANING)

HOWELL N42°38.03' W83°59.26'. NOTAM FILE OZW.

DETROIT

NDB (MHW) 243 OZW at Livingston Co Spencer J. Hardy.

L-28J

## HOWELL

AERONUT PARK BALLOON (13M) 4 E UTC-5(-4DT) N42°36.25' W83°51.52'

DETROIT

980 NOTAM FILE LAN

Not insp.

RWY B1: 900X250 (TURF)

**AIRPORT REMARKS:** Attended irregularly. Contact owner at 517-552-1236 when using for first time. Acft in the vicinity using Rwy 09-27 adjacent to the S at McKenzie's Landing (1MI5). No snow removal. Support vehicles be alert when driving on grass in spring and fall when wet due to possible soft areas.

**COMMUNICATIONS:** CTAF 122.9

LIVINGSTON CO SPENCER J. HARDY (OZW) 3 NW UTC-5(-4DT) N42°37.77' W83°58.93'

DETROIT

962 B S4 FUEL 100LL, JET A TPA-2001(1039) NOTAM FILE OZW

COPTER

RWY 13-31: H5002X100 (CONC-GRVD) S-100 HIRL 0.4% up NW

H-106, L-28J

RWY 13: MALSR. PAPI(P4L)—GA 3.0° TCH 47'. Trees.

IAP

RWY 31: REIL. PAPI(P4L)—GA 3.0° TCH 30'. Trees.

**AIRPORT REMARKS:** Attended Mon-Fri 1200-2200Z±, Sat-Sun 1300-1700Z±. For fuel after hrs phone 517-548-4945. Deer and birds on and invof arpt. HIRL Rwy 13-31 ops low ints dusk-0300Z±; to increase ints and ACTIVATE after 0300Z±—CTAF. ACTIVATE REIL Rwy 31 and MALSR Rwy 13—CTAF. PAPI Rwy 13 and Rwy 31 ops dawn-dusk, thereafter—CTAF.

**WEATHER DATA SOURCES:** AWOS-3 118.875 (517) 546-4450.**COMMUNICATIONS:** CTAF/UNICOM 123.0

® DETROIT APP/DEP CON 127.5 CLNC DEL 121.725

GCO 121.725 (DETROIT METRO CLNC and FLIGHT SERVICES)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE LAN.

SALEM (L) VORTAC 114.3 SVM Chan 90 N42°24.53'

W83°35.65' 311° 21.7 NM to fld. 950/3W.

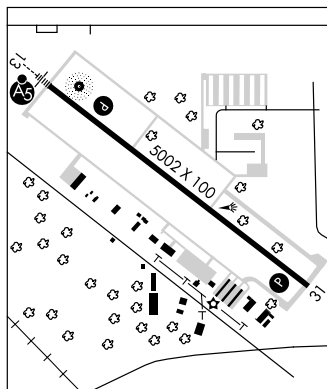
HOWELL NDB (MHW) 243 OZW N42°38.03' W83°59.26' at fld.

NOTAM FILE OZW.

ILS/DME 108.55 I-OGO Chan 22Y Rwy 13. ILS/DME

unmonitored.

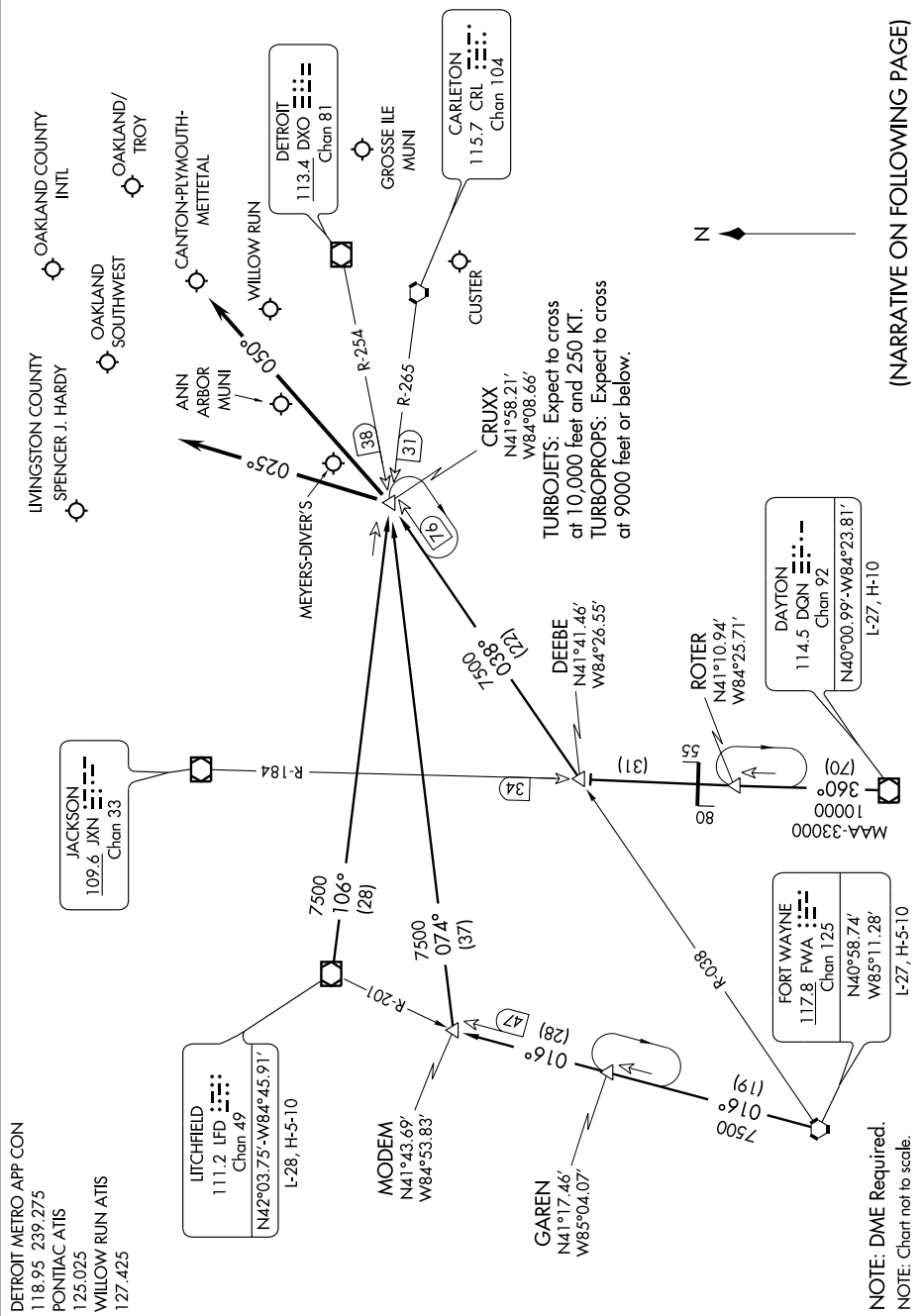
**COMM/NAV/WEATHER REMARKS:** For CLNC DEL key frequency 121.725 4 times. To contact FSS key frequency 121.725 6 times; one second on/one second off; monitor 121.725 while electronic equipment dials Detroit CLNC DEL/Lansing FSS.



## CRUXX FOUR ARRIVAL

DETROIT, MICHIGAN

EC-1, 23 SEP 2010 to 21 OCT 2010



## CRUXX FOUR ARRIVAL

(CRUXX.CRUXX4) 10210

DETROIT, MICHIGAN

EC-1, 23 SEP 2010 to 21 OCT 2010

## CRUXX FOUR ARRIVAL (CRUXX.CRUX4)

DETROIT, MICHIGAN

## ARRIVAL DESCRIPTION

DAYTON TRANSITION (DQN.CRUX4): From over DQN VOR/DME via DQN R-360 and JXN R-184 to DEEBE INT and FWA R-038 to CRUXX INT. Thence . . . .

FORT WAYNE TRANSITION (FWA.CRUX4): From over FWA VORTAC via FWA R-016 to MODEM INT and DXO R-254 to CRUXX INT. Thence . . . .

LITCHFIELD TRANSITION (LFD.CRUX4): From over LFD VORTAC via LFD R-106 to CRUXX INT. Thence . . . .

. . . . Aircraft landing Y47, PTK, 0MI7, ØZW, ONZ, 1D2, TTF, VLL: From over CRUXX INT via 025° heading.

. . . . Aircraft landing YIP or ARB: From over CRUXX INT via 050° heading. Expect radar vector to final approach course.

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010

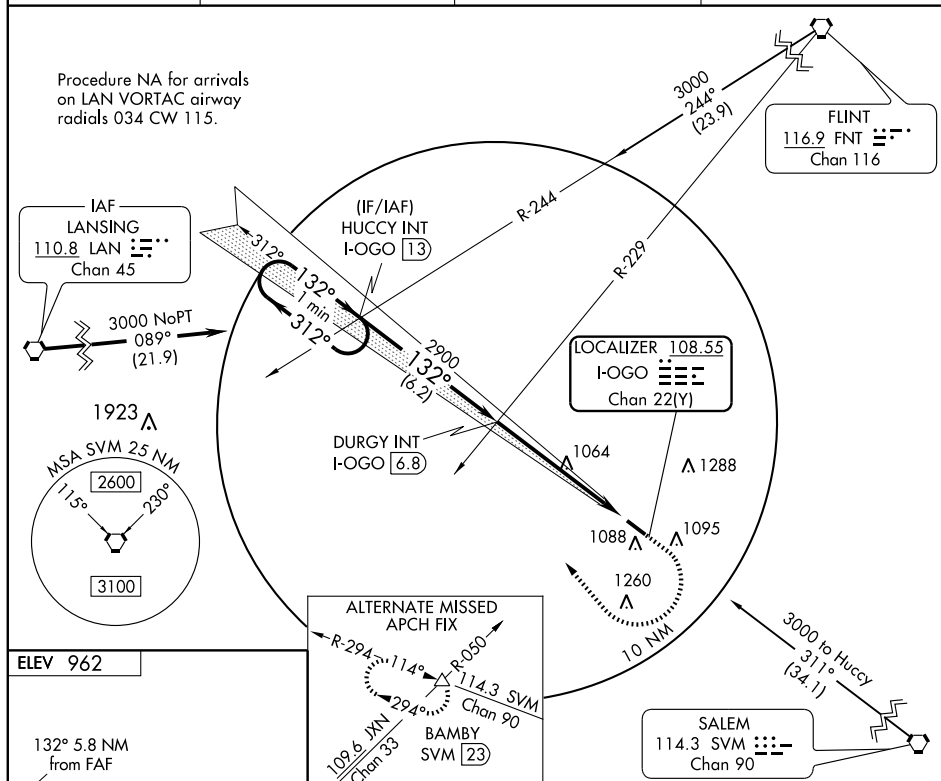
LOC/DME I-OGO <b>108.55</b> Chan <b>22(Y)</b>	APP CRS <b>132°</b>	Rwy Idg TDZE Apt Elev	<b>5002</b> <b>962</b> <b>962</b>
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## ILS or LOC RWY 13

HOWELL / LIVINGSTON COUNTY SPENCER J. HARDY (OZW)

<b>NA</b> If local altimeter setting not received, use Bishop Intl altimeter setting and increase all DAs/MDAs 80 feet.	<b>MALSR</b> 	<b>MISSED APPROACH:</b> Climb to 1600 then climbing right turn to 3000 via heading 356° and I-OGO NW course to HUCCY Int/I-OGO 13 DME and hold.
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AWOS-3 <b>118.875</b>	DETROIT APP CON <b>127.5 363.2</b>	CLNC DEL <b>121.725 (GCO)</b>	UNICOM <b>123.0 (CTAF) 0</b>
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ELEV 962

Diagram illustrating the runway layout and elevation data:

- Runway 31 (HIRL Rwy 13-31) is shown with a width of 5002 X 100.
- Elevation at the start of the runway is 1079±.
- Elevation at the end of the runway is 960±.
- The gradient is indicated as -0.4% UP.
- TDZE 962 is noted.
- Runway 31 is also labeled as REIL Rwy 31.

FAF to MAP 5.8 NM

Knots 60 90 120 150 180

Min:Sec 5:48 3:52 2:54 2:19 1:56

HOWELL, MICHIGAN  
Orig 10154

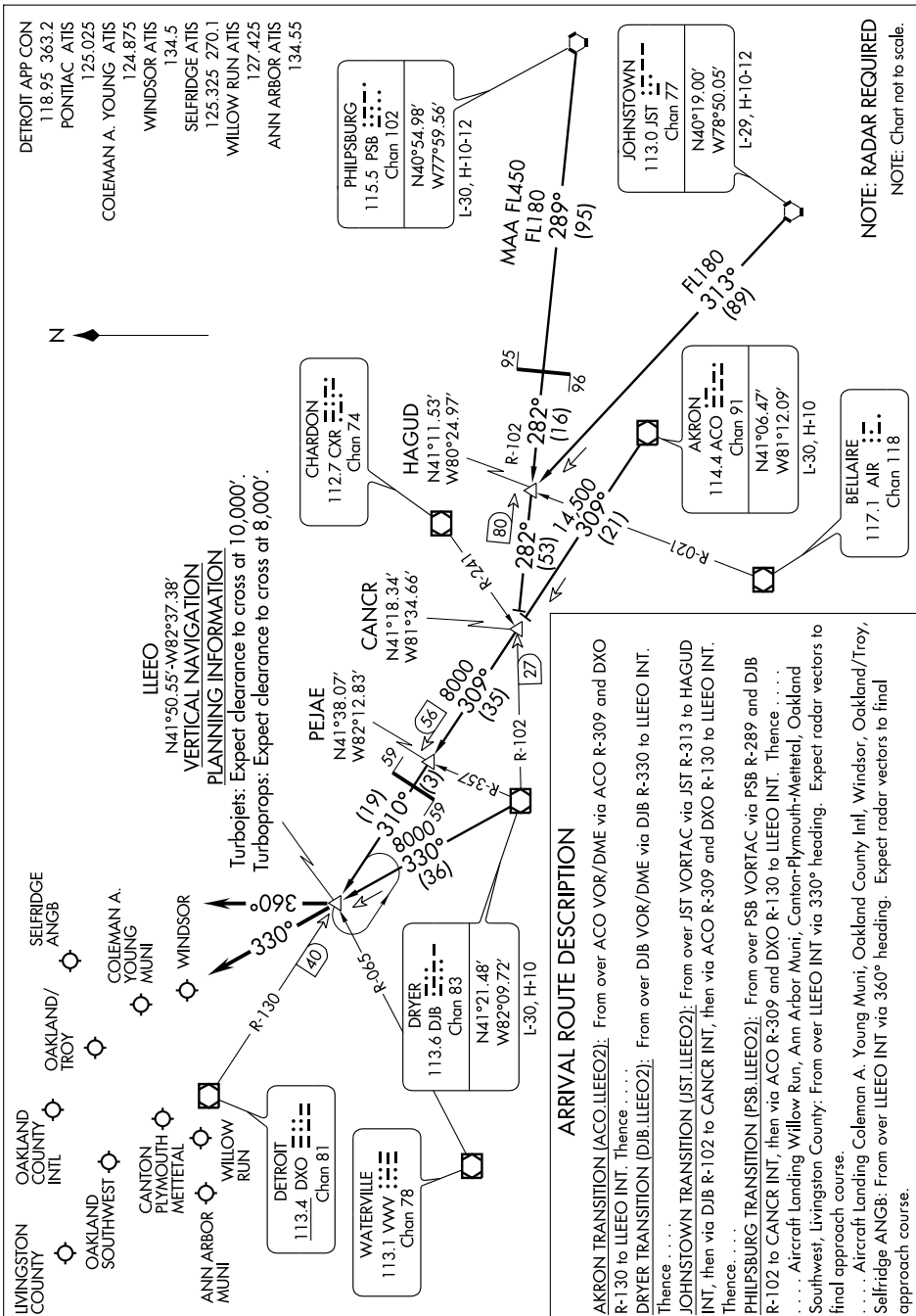
One Minute Holding Pattern	HUCCY INT I-OGO 13	1600	3000	HUCCY INT I-OGO 13
3000	312°	132°	2900	2900
GS 3.00° TCH 48	6.2 NM	4.8 NM	1 NM	
CATEGORY	A	B	C	D
S-ILS 13		1162-1/2	200 (200-1/2)	
S-LOC 13		1320-1/2	358 (400-1/2)	1320-3/4 358 (400-3/4)
CIRCLING	1460-1	498 (500-1)	1460-1/2 498 (500-1/2)	1520-2 558 (600-2)

HOWELL / LIVINGSTON COUNTY SPENCER J. HARDY (OZW)  
42°38'N - 83°59'W

## ILS or LOC RWY 13

## LLEEO TWO ARRIVAL

EC-1, 23 SEP 2010 to 21 OCT 2010



## LLEEO TWO ARRIVAL

NDB OZW <b><u>243</u></b>	APP CRS <b>119°</b>	Rwy Idg <b>5002</b> TDZE <b>962</b> Apt Elev <b>962</b>
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NDB RWY 13

HOWELL / LIVINGSTON COUNTY SPENCER J. HARDY (OZW)

**T** If local altimeter setting not received, use Bishop Intl altimeter setting and increase all MDAs 80 feet. Visibility reduction by helicopters NA. BRRGR FIX minimums NA when using Bishop Intl altimeter setting.

**A** NA

MALSR

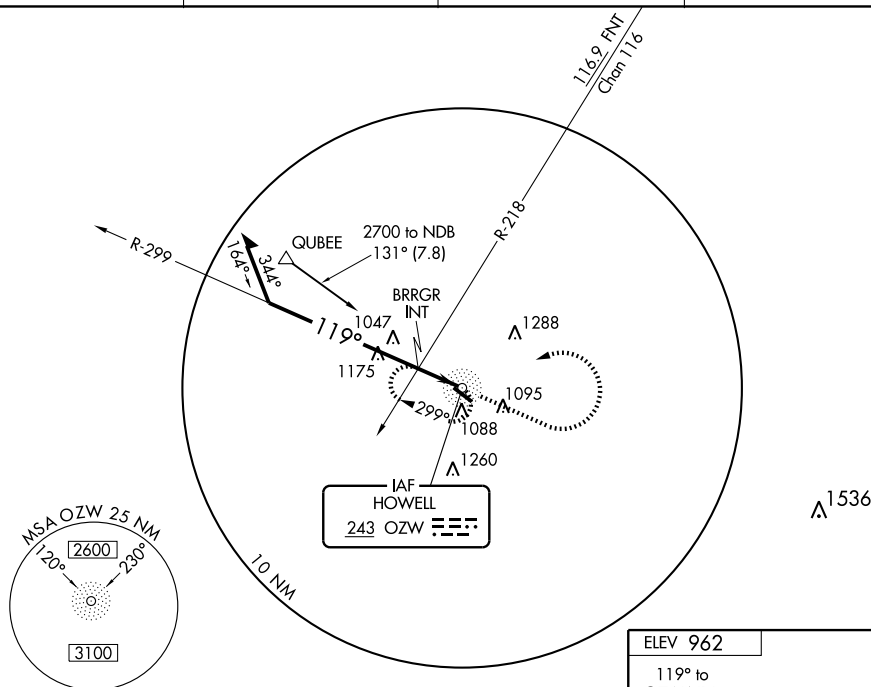


**MISSED APPROACH:** Climb to 2700 then left turn direct OZW NDB and hold.

AWOS-3  
118.875

DETROIT APP CON  
127.5 363.2

CLNC DEL  
**121.725** (GCO)

UNICOM  
123.0 (CTAF) **L**

Remain  
within 10 NM

[illegible]

VGSI and descent  
angles not coincident.

ELEV 962  
119° to  
QZW NDB

1079 ±

TDZE  
962

702

HIRL Rwy 1

REIL Rwy 3

## QUALITY SPE

CATEGORY	A	B	C	D
S-13	1540-1	578 (600-1)	1540-1½ 578 (600-1½)	1540-1¾ 578 (600-1¾)
CIRCLING	1540-1	578 (600-1)	1540-1½ 578 (600-1½)	1540-2 578 (600-2)
BRRGR FIX MINIMUMS				
S-13	1380-1	418 (500-1)	1380-1¼	418 (500-1¼)
CIRCLING	1460-1	498 (500-1)	1460-1½ 498 (500-1½)	1520-2 558 (600-2)

HOWELL, MICHIGAN  
Amdt 3 10154

HOWELL / LIVINGSTON COUNTY SPENCER J. HARDY (OZW)  
42°38'N - 83°59'W NDB PWV 12

NDB RWY 13

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1. 23 SEP 2010 to 21 OCT 2010

WAAS CH <b>69601</b> <b>W13A</b>	APP CRS <b>132°</b>	Rwy Idg TDZE Apt Elev <b>962</b>	<b>5002</b> <b>962</b>
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# RNAV (GPS) RWY 13

HOWELL / LIVINGSTON COUNTY SPENCER J. HARDY (OZW)

**▼** DME/DME RNP-0.3 NA. If local altimeter setting not received, use Bishop Intl altimeter setting and increase all DAs/MDAs 80 feet. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (117°F). Visibility reduction by helicopters NA. Baro-VNAV NA when using Bishop Intl altimeter setting.

MALSR



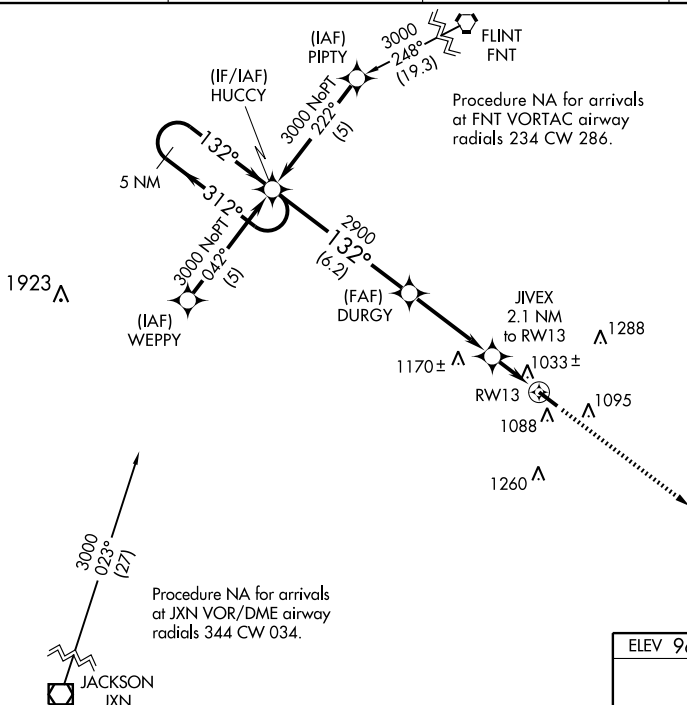
**MISSED APPROACH:**  
Climb to 2800 direct BROVI and hold.

AWOS-3  
**118.875**

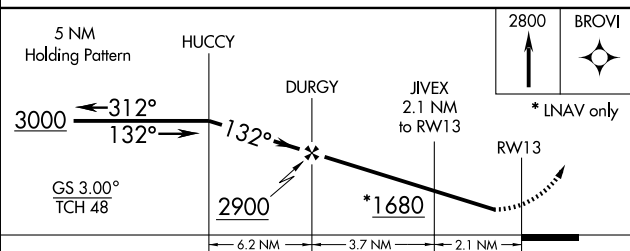
DETROIT APP CON  
**127.5 363.2**

CLNC DEL  
**121.725 (GCO)**

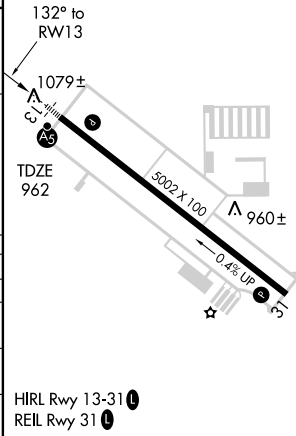
UNICOM  
**123.0 (CTAF) 0**



ELEV 962



CATEGORY	A	B	C	D
LPV DA		1244-1	282 (300-1)	
LNAV/VNAV DA		1324-1¼	362 (400-1¼)	
LNAV MDA		1300-1	338 (400-1)	
CIRCLING	1460-1¼	498 (500-1¼)	1460-1½ 498 (500-1½)	1520-2 558 (600-2)



APP CRS <b>312°</b>	Rwy Idg TDZE Apt Elev	<b>5002</b> <b>943</b> <b>962</b>
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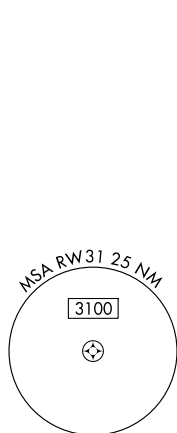
## RNAV (GPS) RWY 31

HOWELL / LIVINGSTON COUNTY SPENCER J. HARDY (OZW)

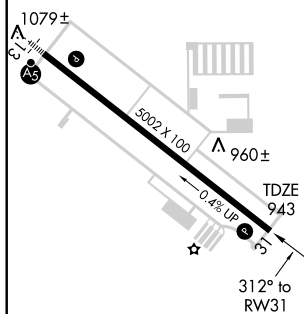
**▽** DME/DME RNP-0.3 NA. If local altimeter setting not received, use Bishop Intl altimeter setting and increase all MDAs 80 feet.

MISSED APPROACH: Climb to 3000 direct HUCCY and hold.

AWOS-3 <b>118.875</b>	DETROIT APP CON <b>127.5 363.2</b>	CLNC DEL <b>121.725</b> (GCO)	UNICOM <b>123.0</b> (CTAF) <b>0</b>
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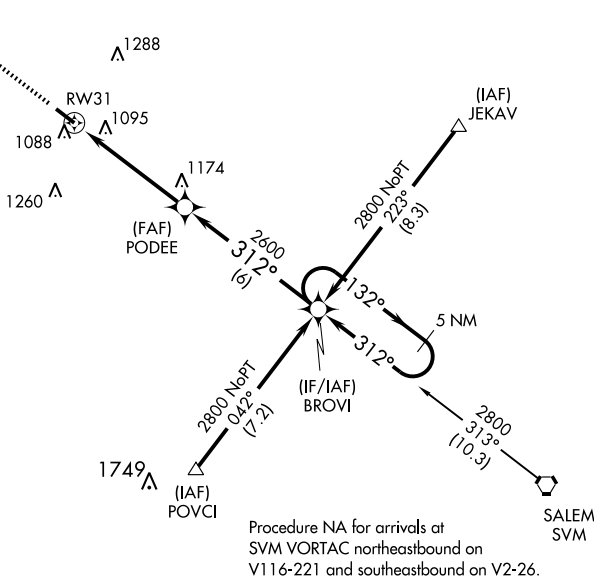


ELEV 962



HIRL Rwy 13-31 **0**  
REIL Rwy 31 **0**

HOWELL, MICHIGAN  
Orig 10154



CATEGORY	A		B		C		D	
	1400-1		457 (500-1)		1400-1¼ 457 (500-1¼)		1400-1½ 457 (500-1½)	
CIRCLING	1460-1		498 (500-1)		1460-1½ 498 (500-1½)		1520-2 558 (600-2)	

HOWELL / LIVINGSTON COUNTY SPENCER J. HARDY (OZW)  
42°38'N - 83°59'W

RNAV (GPS) RWY 31



## SPRTN THREE ARRIVAL

DETROIT, MICHIGAN

DETROIT APP CON

127.5 239.275

WILLOW RUN ATIS 127.425

PONTIAC ATIS 125.025

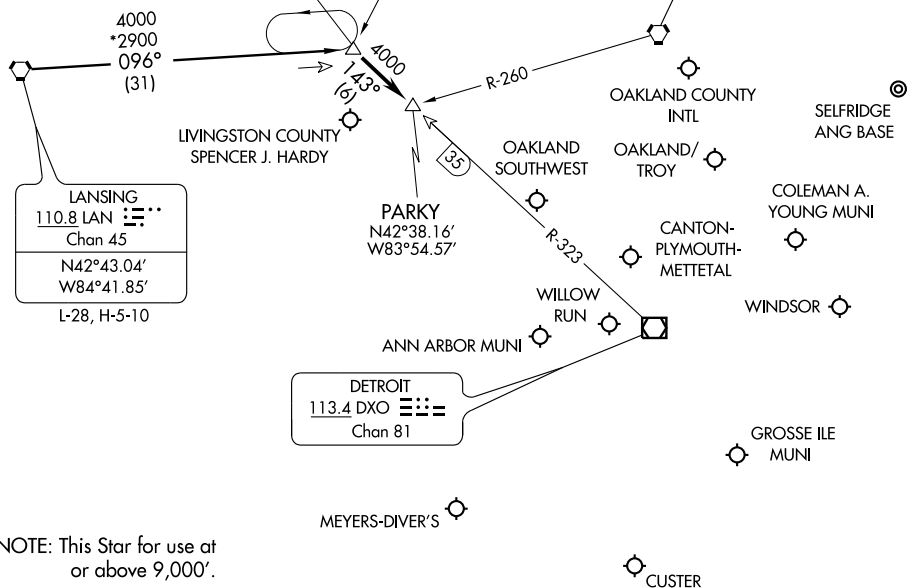
COLEMAN A. YOUNG ATIS 124.875

WINDSOR ATIS 134.5

SELFRIAGE ATIS 125.325 270.1

SPRTN

N42°42.52'-W84°00.23'

VERTICAL NAVIGATION  
PLANNING INFORMATIONTURBOJETS/TURBOPROPS:  
Expect clearance to cross at  
9000'.NOTE: This Star for use at  
or above 9,000'.

NOTE: Chart not to scale.

EC-1, 23 SEP 2010 to 21 OCT 2010

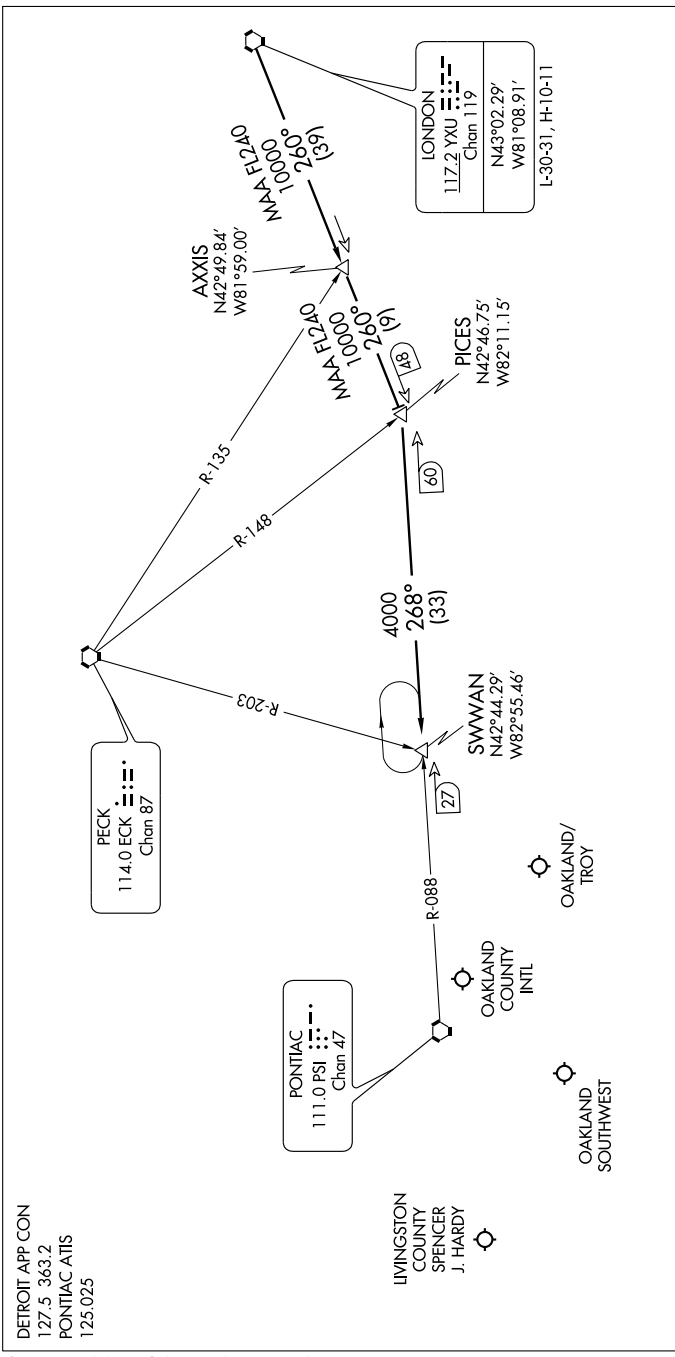
LANSING TRANSITION (LAN.SPRTN3): From over LAN VORTAC via LAN R-096  
to SPRTN INT. Thence . . . .. . . . Aircraft landing: DET, PTK, VLL, D98, MTC, ARB, YIP, ONZ,  
1D2, TTF, Y47, 36MI, OZW, 3TE, YQG: From over SPRTN INT via DXO R-323  
to PARKY INT. Thence . . . .

. . . . Expect radar vectors to final approach course.

## SPRTN THREE ARRIVAL

DETROIT, MICHIGAN

EC-1, 23 SEP 2010 to 21 OCT 2010



ARRIVAL ROUTE DESCRIPTION

LONDON TRANSITION (YXU.SWWAN1): From over YXU VORTAC via YXU R-260 to PICES INT, then via PSI R-088 to SWWAN INT. Thence . . . .

. . . . From SWWAN, expect radar vectors to final approach course.

NOTE: RADAR Required.  
NOTE: Chart not to scale.

EC-1, 23 SEP 2010 to 21 OCT 2010

VORTAC SVM  
**114.3**  
 Chan **90**

APP CRS  
**311°**

Rwy ldg **5002**  
 TDZE **943**  
 Apt Elev **962**

**VOR RWY 31**

HOWELL / LIVINGSTON COUNTY SPENCER J. HARDY (OZW)

- ▼ If local altimeter setting not received, use Bishop  
 Int'l altimeter setting and increase all MDA's 80 feet.  
 ▲ Visibility reduction by helicopters NA.

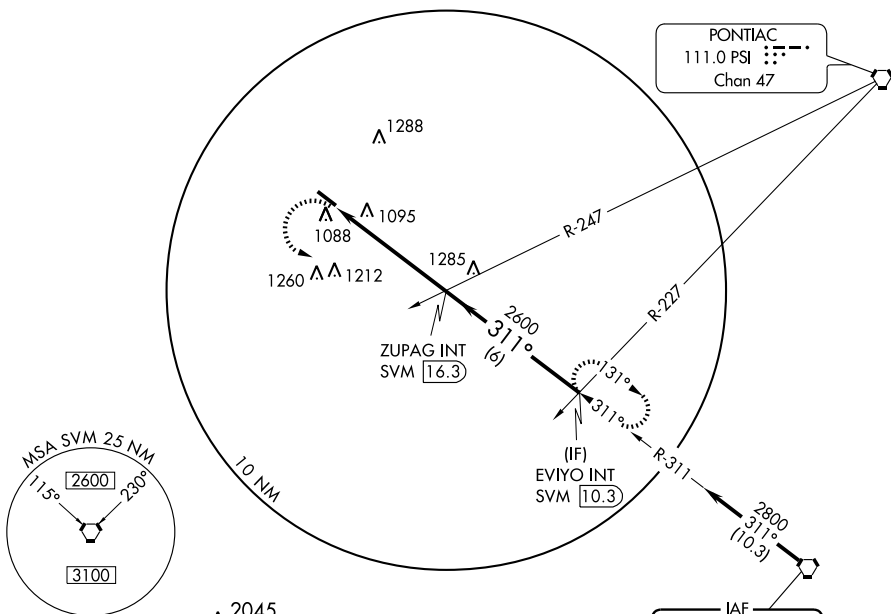
MISSED APPROACH: Climbing left turn to 2800 via heading  
 090° and SVM R-311 to EVIYO Int/10.30 DME and hold.

AWOS-3  
**118.875**

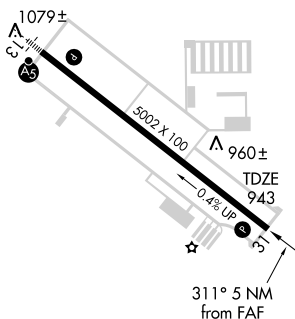
DETROIT APP CON  
**127.5 363.2**

CLNC DEL  
**121.725** (GCO)

UNICOM  
**123.0** (CTAF) **0**



ELEV 962



HIRL Rwy 13-31 **0**  
 REIL Rwy 31 **0**

FAF to MAP 5 NM

Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40

HOWELL, MICHIGAN  
 Amdt 11 10154

2800

hdg 090°  
SVM R-311

EVIYO INT  
SVM 10.3

EVIYO INT  
SVM 10.3

2800

Procedure Turn NA

SVM 21.3

ZUPAG INT  
SVM 16.3

2600

311°

≤ 3.04°  
TCH 45

5 NM

6 NM

VGSI and descent angles not coincident.

CATEGORY	A	B	C	D
S-31	1540-1 597 (600-1)	1540-1¼ 597 (600-1¼)	1540-1½ 597 (600-1½)	1540-1¾ 597 (600-1¾)
CIRCLING	1540-1 578 (600-1)	1540-1¼ 578 (600-1¼)	1540-1½ 578 (600-1½)	1540-2 578 (600-2)

HOWELL / LIVINGSTON COUNTY SPENCER J. HARDY (OZW)  
 42°38'N - 83°59'W

**VOR RWY 31**

**RAETHER** (4Y1) 6 SE UTC-5(-4DT) N42°33.91' W83°51.38'

**DETROIT  
COPTER**

982 NOTAM FILE LAN

**RWY 17-35:** 2206X60 (TURF)

**RWY 17:** Thld dsplcd 540'. Trees.

**RWY 35:** Thld dsplcd 553'. Trees.

**AIRPORT REMARKS:** Attended irregularly. Deer on and invof rwy. Ultralight activity on and invof arpt. Heavy equipment adjacent to W side of Rwy 35. Rwy 17-35 thld and dsplcd thlds marked with 3' cones.

**COMMUNICATIONS:** CTAF 122.9

**HURON CO MEM** (See BAD AXE)

**INDIAN CREEK RANCH** (See DECKERVILLE)

## INDIAN RIVER

**CALVIN CAMPBELL MUNI** (Y65) 1 E UTC-5(-4DT) N45°24.50' W84°36.00'

**LAKE HURON  
L-31C**

602 FUEL 100LL NOTAM FILE LAN

**RWY 10-28:** H3006X50 (ASPH) LIRL

**RWY 10:** Trees.

**RWY 28:** Thld dsplcd 600'. Trees.

**AIRPORT REMARKS:** Attended irregularly. Snow removal intermittent; to verify condition call 231-238-8614. Deer and birds on and invof arpt. ACTIVATE LIRL Rwy 10-28—CTAF.

**COMMUNICATIONS:** CTAF 122.9

**RADIO AIDS TO NAVIGATION:** NOTAM FILE PLN.

**PELLSTON (L) VORTACW** 111.8 PLN Chan 55 N45°37.84' W84°39.85' 175° 13.6 NM to fld. 840/6W.  
HIWAS.

## INTERLOCHEN

**GREEN LAKE** (Y88) 3 S UTC-5(-4DT) N44°36.37' W85°45.51'

**GREEN BAY**

866 NOTAM FILE LAN

**RWY 05-23:** 2800X170 (TURF)

**RWY 05:** Trees.

**RWY 23:** Thld dsplcd 600'. Trees.

**RWY 16-34:** 1700X170 (TURF)

**RWY 16:** Thld dsplcd 200'. Trees.

**RWY 34:** Thld dsplcd 380'. Trees.

**AIRPORT REMARKS:** Unattended. CLOSED Nov-Mar. Remote control model acft opr area south of Rwy 34 end. 460' antenna 1.25 NM N of arpt. Noise sensitive area one mile N of arpt. Athletic flds on centerline N end Rwy 16-34; Do not use rwy when in use. Rwy 05-23 and Rwy 16-34 and dsplcd thlds marked with 3' yellow cones.

**COMMUNICATIONS:** CTAF 122.9

**IONIA CO** (Y70) 3 S UTC-5(-4DT) N42°56.28' W85°03.63'

**CHICAGO  
L-281  
IAP**

818 B S4 FUEL 100LL, JET A NOTAM FILE LAN

**RWY 09-27:** H4300X75 (ASPH) S-19 MIRL 0.3% up W

**RWY 09:** PAPI(P4L)—GA 3.0° TCH 25'. Tree.

**RWY 27:** REIL. PAPI(P4L)—GA 3.0° TCH 22'. Trees.

**RWY 18-36:** 4290X340 (TURF) 0.3% up S

**RWY 18:** Trees.

**RWY 36:** Tree.

**AIRPORT REMARKS:** Attended 1400-2200Z±. Rwy 18-36 CLOSED Nov 15-Apr 15. Glider ops conducted S of Rwy 09-27 and W of Rwy 18-36 use freq 123.3 in practice area. Gliders use 122.8 in tfc pattern. ACTIVATE rotating bcn—122.8. ACTIVATE MIRL Rwy 09-27, PAPI and REIL Rwy 27—122.8. Rwy 18 ends marked with 3' yellow cones. Acft parked adjacent to Rwy 18-36 and 09-27 during glider operations.

**WEATHER DATA SOURCES:** AWOS-3 118.9 (616) 523-1852.

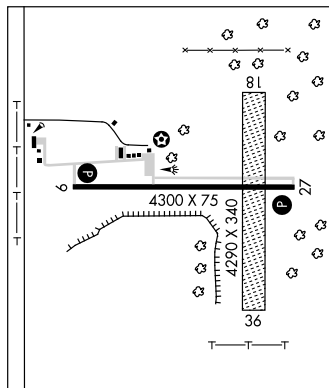
**COMMUNICATIONS:** CTAF/UNICOM 122.8

**GRAND RAPIDS RCO** 122.1R 115.95 (LANSING RADIO)

® **LANSING APP/DEP CON** 118.65

**RADIO AIDS TO NAVIGATION:** NOTAM FILE LAN.

**LANSING (L) VORTACW** 110.8 LAN Chan 45 N42°43.04' W84°41.85' 315° 20.8 NM to fld. 887/5W.



**IOSCO CO** (See EAST TAWAS)

**IRON CO** (See CRYSTAL FALLS)

APP CRS  
**276°**

Rwy Idg **4300**  
TDZE **812**  
Apt Elev **818**

# RNAV (GPS) RWY 27

IONIA COUNTY (Y70)



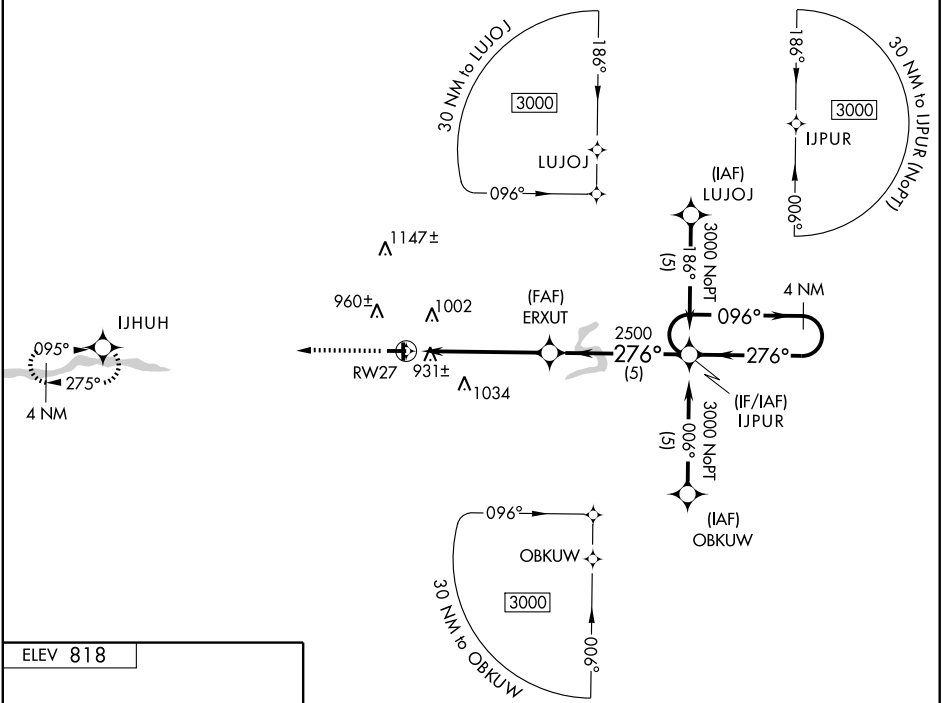
Use Lansing altimeter setting.  
DME/DME RNP-0.3 NA.  
GPS or RNP-0.3 required.

MISSED APPROACH: Climb to 3000 direct IJHUH  
WP and hold.

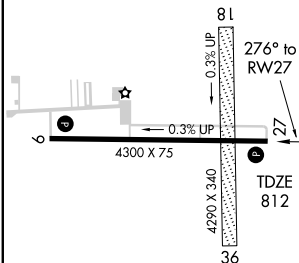
AWOS-3  
**118.9**

LANSING APP CON  
**118.65 226.4**

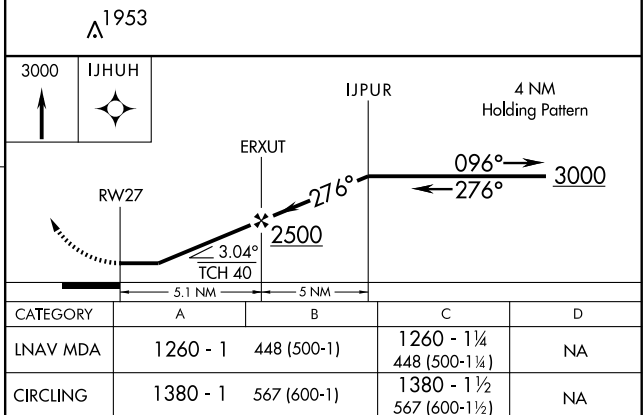
UNICOM  
**122.8 (CTAF)**



ELEV 818



REIL Rwy 27  
MRL Rwy 9-27



VORTAC LAN <b>110.8</b> Chan <b>45</b>	APP CRS <b>315°</b>	Rwy Idg TDZE Apt Elev <b>N/A</b> <b>818</b>
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**VOR-A**  
IONIA COUNTY (Y70)

**▼** Use Lansing altimeter setting; when not received, use Charlotte altimeter setting and increase all MDAs 20 feet, and increase Cat C visibility ¼ mile.

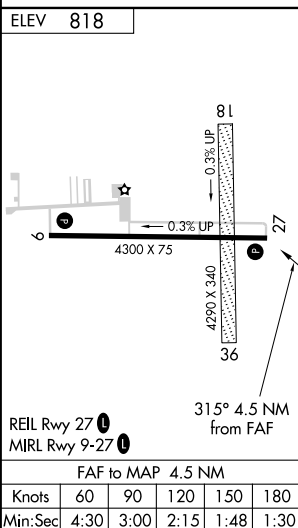
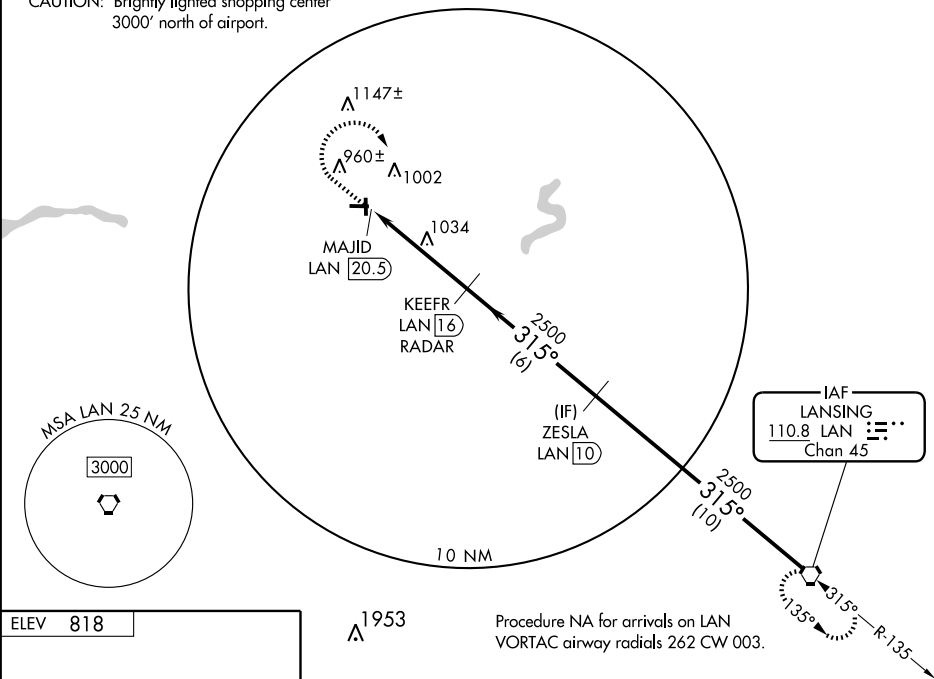
**MISSED APPROACH:** Climb to 2500 then right turn direct LAN VORTAC and hold.

AWOS-3  
**118.9**

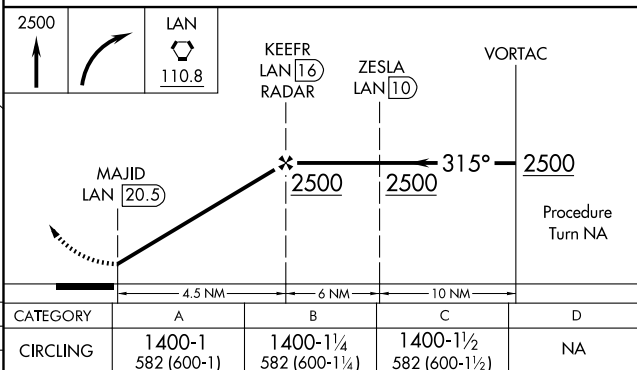
LANSING APP CON  
**118.65 226.4**

UNICOM  
**122.8 (CTAF) 0**

**CAUTION:** Brightly lighted shopping center 3000' north of airport.



## DME or RADAR REQUIRED



**IRON MOUNTAIN** N45°48.96' W88°06.73' NOTAM FILE IMT.

GREEN BAY

(L) VOR/DME 111.2 IMT Chan 49 at Ford. 1128/2W.

L-31A

DME unusable 141°–220° byd 20 NM blo 2900'; 221°–315° byd 15 NM blo 4000'; 316°–019° byd 20 NM blo 5000', 020°–140° blo 10000'.

RCO 122.1R 111.2T (GREEN BAY RADIO)

**IRON MOUNTAIN/KINGSFORD****FORD** (IMT) 3 W UTC–6(–5DT) N45°49.10' W88°06.87'

GREEN BAY

1182 B S4 FUEL 100LL, JET A OX 4 TPA—See Remarks

Class I, ARFF Index A

H-2K, L-31A

NOTAM FILE IMT

IAP

RWY 01–19: H6501X150 (ASPH–PFC) S–100, D–100, 2S–127, 2D–190 HIRL 0.8% up N

RWY 01: MALSR. Trees.

RWY 19: REIL. VASI(V4L)—GA 3.0° TCH 42'.

RWY 13–31: H3809X75 (ASPH) S–30, D–50, 2D–80 MIRL

RWY 13: Trees.

RWY 31: REIL. VASI(V4L)—GA 4.0° TCH 40'. Trees.

**RUNWAY DECLARED DISTANCE INFORMATION**

RWY 01: TORA–6501 TODA–6501 ASDA–6501 LDA–6501

RWY 13: TORA–3809 TODA–3809 ASDA–3809 LDA–3809

RWY 19: TORA–6501 TODA–6501 ASDA–6501 LDA–6501

RWY 31: TORA–3809 TODA–3809 ASDA–3809 LDA–3809

**AIRPORT REMARKS:** Attended 1130–0530Z†. Ldg fee. Deer; coyotes and

birds on and invof arpt. 48 hr PPR for unscheduled air carrier ops

with more than 30 passenger seats call 906–774–4830. Air

carrier ops involving acft with more than 9 passenger seats are

not authorized in excess of 15 minutes before or after scheduled

arrival/dep times without prior coordination with arpt manager and

confirmation that ARFF is avbl prior to tkf or landing. ARFF crews

will be monitoring UNICOM/CTAF during all air carrier ops. Snow

removal crew will be monitoring CTAF/UNICOM during all air

carrier ops to pass along updated sfc condition reports. ACTIVATE HIRL Rwy 01–19, MIRL Rwy 13–31, VASI Rwy

19 and 31; REIL Rwy 19 and 31; MALSR Rwy 01—CTAF. TPA—1982(800) Jet/Turbo–Jet/Prop over 12,500 lbs

2682(1500).

**WEATHER DATA SOURCES:** ASOS 119.025 (906) 774–1999.**COMMUNICATIONS:** CTAF/UNICOM 122.8

IRON MOUNTAIN RCO 122.1R 111.2T (GREEN BAY RADIO)

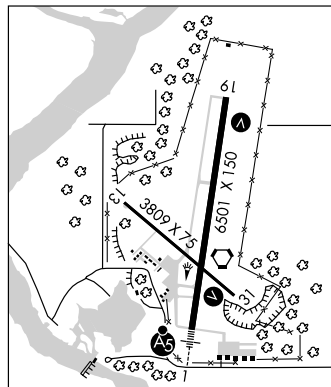
MINNEAPOLIS CENTER APP/DEP CON 121.25

**AIRSPACE:** CLASS E svc Mon–Fri 1200–0400Z†, Sat 1500–0100Z†, Sun 1500–0400Z† other times CLASS G.**RADIO AIDS TO NAVIGATION:** NOTAM FILE IMT.

IRON MOUNTAIN (L) VOR/DME 111.2 IMT Chan 49 N45°48.96' W88°06.73' at fld. 1128/2W.

KORDS NDB (LOM) 255 IM N45°43.63' W088°07.96' 010° 5.5 NM to fld.

ILS 111.5 I–IMT Rwy 01. Class IC. LOM KORDS NDB.

**COMM/NAV/WEATHER REMARKS:** UNICOM monitored part–time.**IRON RIVER****STAMBAUGH** (Y73) 1 SE UTC–6(–5DT) N46°04.73' W88°38.13'

GREEN BAY

1622 NOTAM FILE GRB

RWY 17–35: H2000X40 (ASPH) LIRL (NSTD)

RWY 17: Trees.

**AIRPORT REMARKS:** Unattended. Deer on and invof arpt. 100' drop off at each rwy end. Rwy 17–35 slopes down from

S to N. ACTIVATE LIRL Rwy 17–35—121.9. Rwy 17–35 NSTD LIRL 26' from rwy edge. Rwy 17–35 NSTD basic

marking; does not start at pavement edge. Rwy 17–35 numerous cracks in rwy.

**COMMUNICATIONS:** CTAF 122.9**IRONWOOD** N46°31.94' W90°07.55' NOTAM FILE IWD.

GREEN BAY

(L) VORTACW 108.8 IWD Chan 25 at Gogebic–Iron Co. 1230/1E. HIWAS.

L-141

RCO 122.3 (GREEN BAY RADIO)

LOC I-IMT <b><u>111.5</u></b>	APP CRS <b>010°</b>	Rwy Idg TDZE Apt Elev	<b>6501</b> <b>1133</b> <b>1182</b>
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ILS RWY 1  
IRON MOUNTAIN/FORD (IMT)

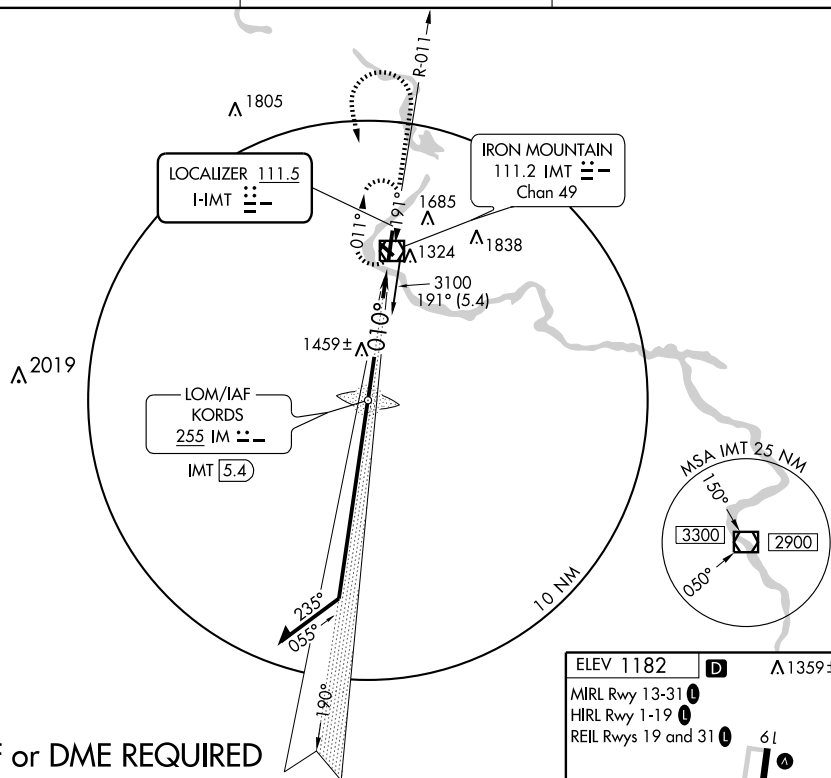
**T** Circling not authorized NE of Rwy 19 and 31.

MALSR

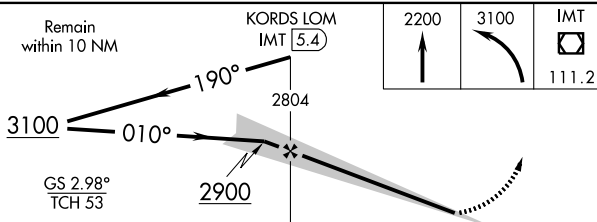
**MISSED APPROACH:** Climb to 2200, then climbing left turn to 3100 direct IMT VOR/DME and hold.

ASOS  
119.025

MINNEAPOLIS CENTER  
121.25 322.5

UNICOM  
122.8 (CTAF) 

ADF or DME REQUIRED



CATEGORY		A	B	C	D
S-ILS 1		1333-½ 200 (200-½)			
S-LOC 1	1720-½ 587 (600-½)	1720-1 587 (600-1)		1720-1¼ 587 (600-1¼)	
CIRCLING	1720-1 538 (600-1)	1780-1½ 598 (600-1½)		1780-2 598 (600-2)	

IRON MOUNTAIN/KINGSFORD, MICHIGAN

Amdt 12 09351

45°49'N - 88°07'W

ELEV 1182	<b>D</b>	A1359±
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MIRI Rwy 13-31 0

HIRE Rwy 1-19

RFII Rws 19 and 31 1

REF ID: A7917 and 01

100

1

 $1172 \pm$ 

X 175

501  
13

3809 4

475



IP—

TDZE 33% L 1

1133 0.80

1192±

A5

010° 5 NM  
f 5AF

from FAF  $\rightarrow$

FAF- MAD FNA

FAF 16 MAP 5 NM				
16	40	60	100	

Knots	60	90	120
Time (min)	5.00	3.33	2.50

Min:Sec	5:00	3:20	2:30
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IRON MOUNTAIN/FORM

USD

IL3 R



LOC I-INT <b><u>111.5</u></b>	APP CRS <b>190°</b>	Rwy Idg <b>6501</b> TDZE <b>1182</b> Apt Elev <b>1182</b>
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## LOC/DME BC RWY 19

IRON MOUNTAIN/FORD (IMT)

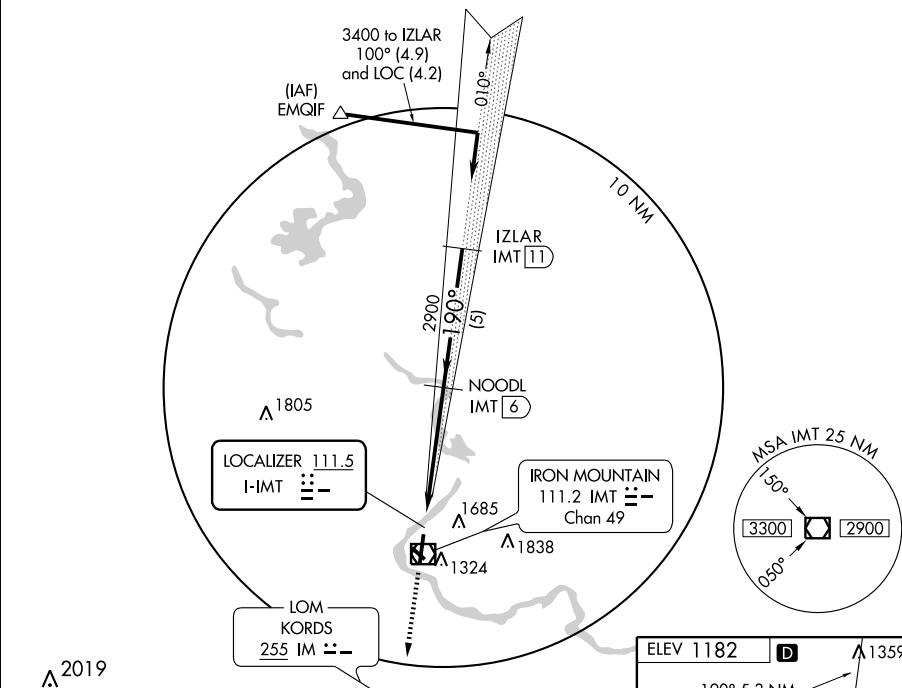


Circling not authorized NE of Rwy 19 and 31.  
DME from IMT VOR/DME.  
Simultaneous reception of I-IMT and IMT DME required.

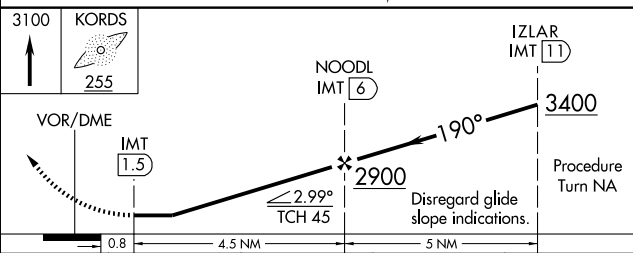
**MISSED APPROACH:** Climb to 3100  
direct KORDS LOM and hold.

ASOS  
119.025

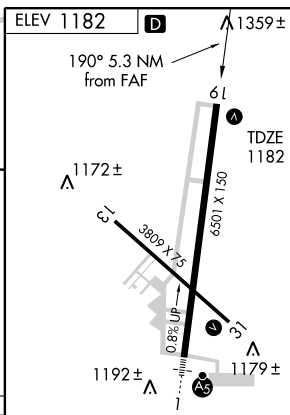
MINNEAPOLIS CENTER  
121.25 322.5

UNICOM  
122.8 (CTAF) 

BACK COURSE  
ADF REQUIRED



CATEGORY	A	B	C	D
S-19	1660-1	478 (500-1)	1660-1¼ 478 (500-1¼)	1660-1½ 478 (500-1½)
CIRCLING	1660-1 478 (500-1)	1720-1 538 (600-1)	1780-1½ 598 (600-1½)	1780-2 598 (600-2)



IRON MOUNTAIN/KINGSFORD, MICHIGAN

Amdt 13 09351

45°49'N - 88°07'W

IRON MOUNTAIN/ FORD (IMT)

## LOC/DME BC RWY 19

LOM IM <b>255</b>	APP CRS <b>010°</b>	Rwy Idg TDZE Apt Elev	<b>6501</b> <b>1133</b> <b>1182</b>
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**NDB RWY 1**  
IRON MOUNTAIN/FORD (IMT)



Circling not authorized NE of Rwy 19 and 31.  
Circling not authorized at night to Rwy 31.

MALSR

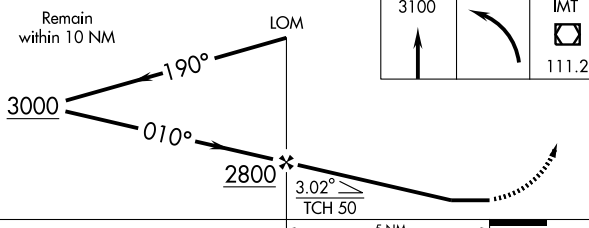
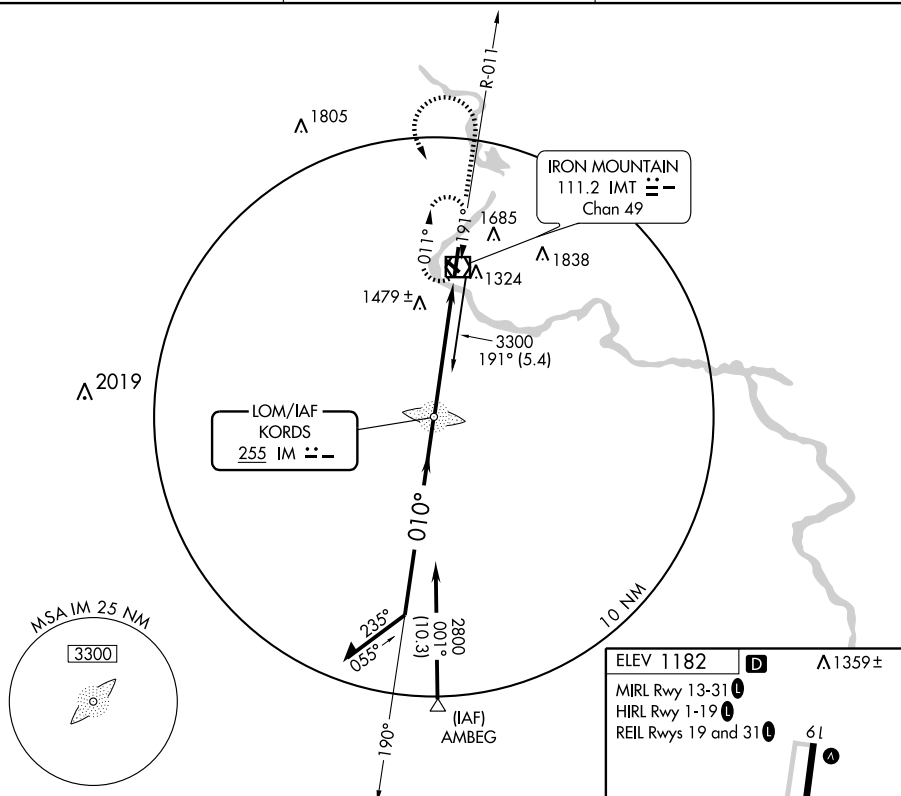


MISSED APPROACH: Climb to 3100,  
then left turn direct IMT VOR/DME and hold.

ASOS  
**119.025**

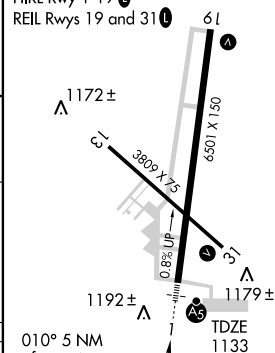
MINNEAPOLIS CENTER  
**121.25 322.5**

UNICOM  
**122.8 (CTAF)** **0**



ELEV 1182 **D** **Λ** 1359±

MIRL Rwy 13-31 **0**  
HIRL Rwy 1-19 **0**  
REIL Rwy 19 and 31 **0**



010° 5 NM from FAF

FAF to MAP 5 NM

Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40

IRON MOUNTAIN/KINGSFORD, MICHIGAN

Orig 09351

45°49'N - 88°07'W

IRON MOUNTAIN/FORD (IMT)

**NDB RWY 1**

WAAS CH <b>77811</b> <b>W01A</b>	APP CRS <b>010°</b>	Rwy Idg <b>6501</b> TDZE <b>1133</b> Apt Elev <b>1182</b>
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# RNAV (GPS) RWY 1

## IRON MOUNTAIN/FORD (IMT)

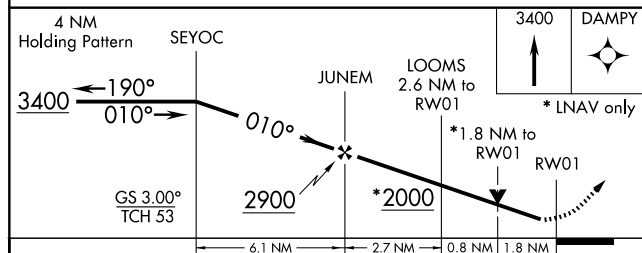
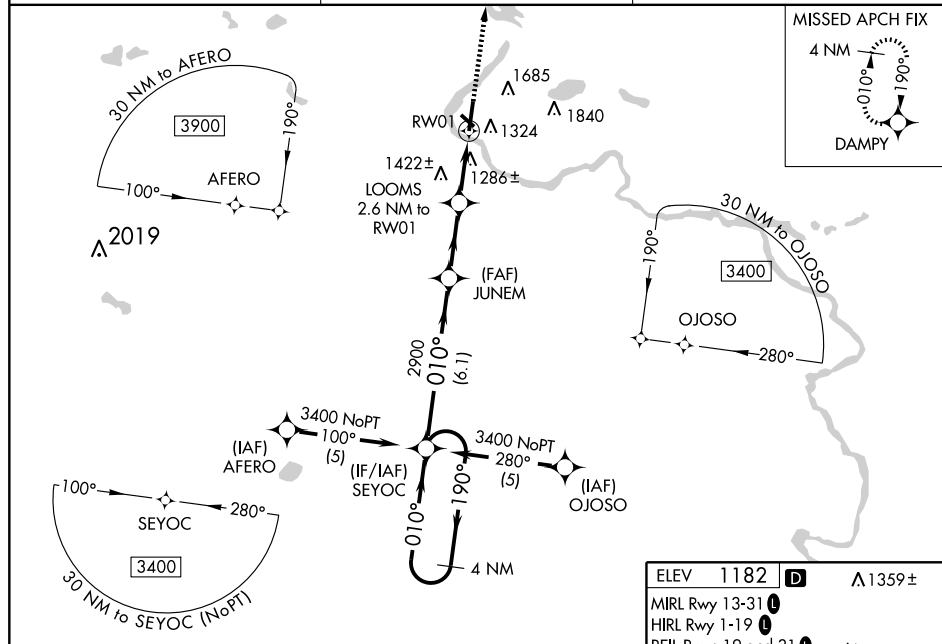
**▼** Inoperative table does not apply to LPV. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). Circling NA NE of Rwy 19 and 31. DME/DME RNP-0.3 NA. When local altimeter setting not received, use Escanaba altimeter setting and increase all DA/MDA 180 feet, increase LPV all Cats visibility ¼ mile, LNAV/VNAV all Cats visibility ¾ mile, LNAV Cat C and D visibility ½ mile, and Circling Cat B visibility ¼ mile, Cat C and D visibility ½ mile. For inoperative MALSR increase visibility LNAV Cat A and B ¼ mile. For Inoperative MALSR when using Escanaba altimeter setting, increase LPV all Cats visibility to 1½ mile, LNAV Cat A visibility to 1 mile. Baro-VNAV and VDP NA when using Escanaba altimeter setting.

MALSR

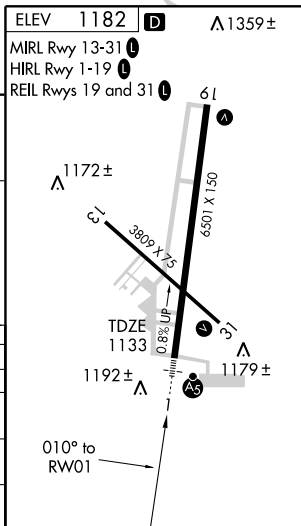


**MISSED  
APPROACH:**  
Climb to 3400  
direct DAMPY  
and hold.

ASOS <b>119.025</b>	MINNEAPOLIS CENTER <b>121.25 322.5</b>	UNICOM <b>122.8</b> (CTAF) <b>0</b>
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CATEGORY	A	B	C	D
LPV DA	1383- $\frac{3}{4}$ 250 (300- $\frac{3}{4}$ )			
LNAV/ VNAV DA	1806-2 673 (700-2)			
LNAV MDA	1760- $\frac{3}{4}$ 627 (600- $\frac{3}{4}$ )		1760-1 $\frac{1}{4}$ 627 (600-1 $\frac{1}{4}$ )	1760-1 $\frac{1}{2}$ 627 (600-1 $\frac{1}{2}$ )
CIRCLING	1760-1	578 (600-1)	1780-1 $\frac{3}{4}$ 598 (600-1 $\frac{3}{4}$ )	1780-2 598 (600-2)



APP CRS  
**190°**

Rwy Idg **6501**  
TDZE **1182**  
Apt Elev **1182**

# RNAV (GPS) RWY 19

IRON MOUNTAIN/FORD (IMT)

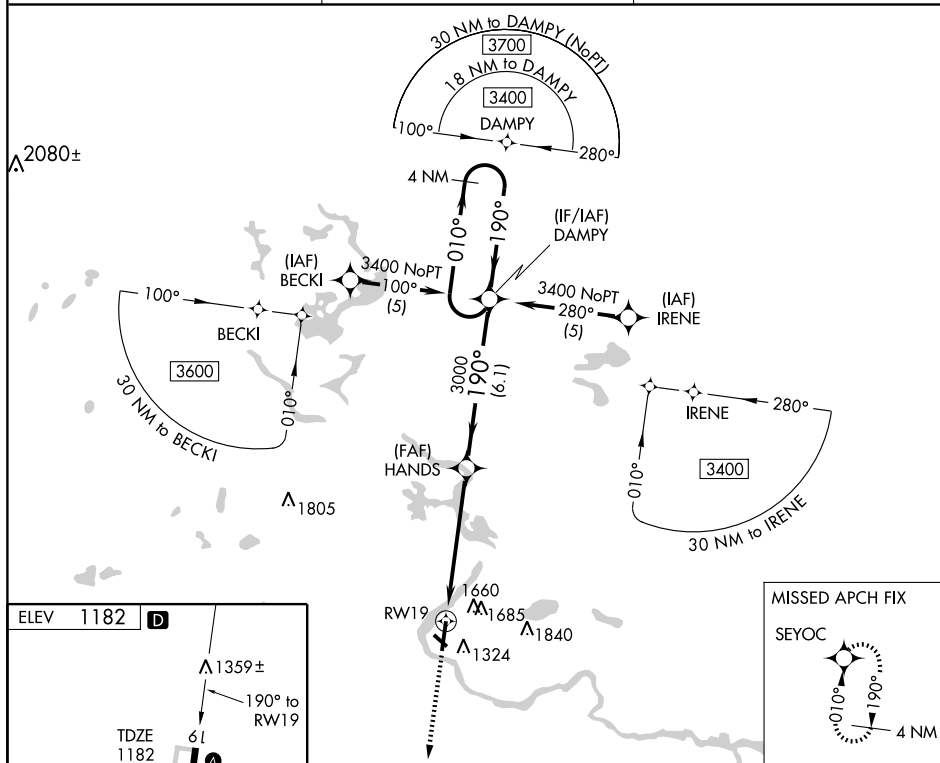
**⚠** Circling NA northeast of Rwy 19 and 31. DME/DME RNP-0.3 NA.  
**⚠** Visibility reduction by helicopters NA.  
When local altimeter setting not received, use Escanaba altimeter setting and increase all MDA 180 feet, increase LNAV and Circling Cat B visibility ¼ mile, Cats C and D visibility ¾ mile.

MISSED APPROACH: Climb to 3400  
direct SEYOC and hold.

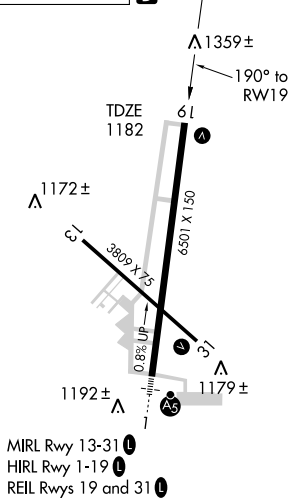
ASOS  
**119.025**

MINNEAPOLIS CENTER  
**121.25 322.5**

UNICOM  
**122.8** (CTAF) **0**

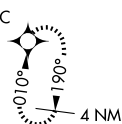


ELEV 1182 **D**

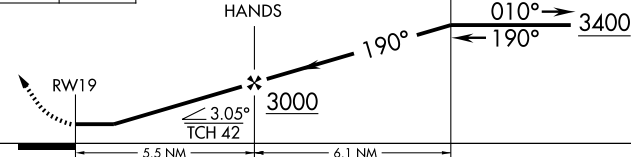


MISSED APCH FIX

SEYOC



DAMPY Holding Pattern



CATEGORY	A	B	C	D
LNAV MDA	1760-1 578 (600-1)	1760-1½ 578 (600-1½)	1760-1½ 578 (600-1½)	1760-1¾ 578 (600-1¾)
CIRCLING	1760-1 578 (600-1)	1780-1½ 598 (600-1½)	1780-1½ 598 (600-1½)	1780-2 598 (600-2)

VOR/DME IMT	APP CRS	Rwy Idg	<b>3809</b>
<b>111.2</b>	<b>323°</b>	TDZE	<b>1131</b>
Chan <b>49</b>		Apt Elev	<b>1182</b>

**VOR RWY 31**

IRON MOUNTAIN/FORD (IMT)

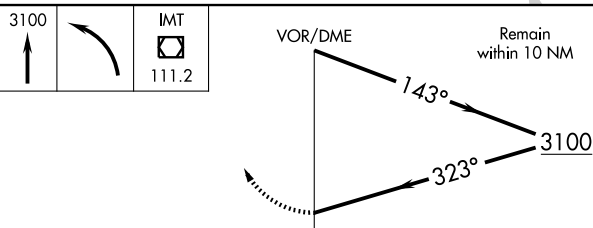
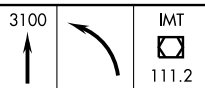
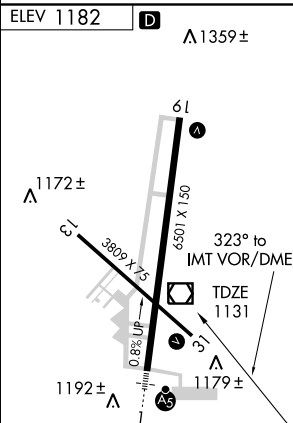
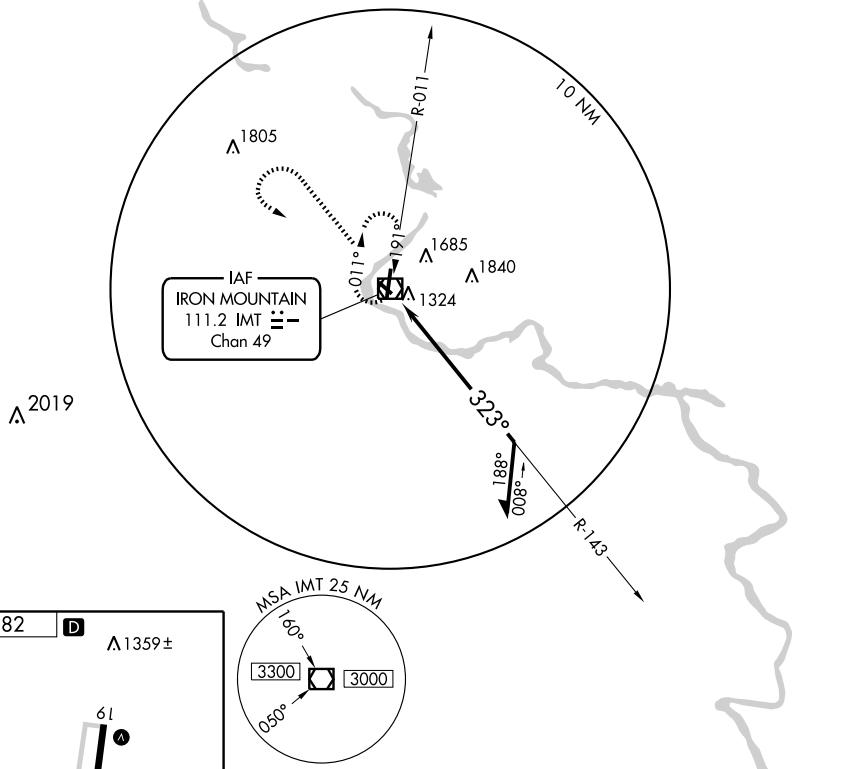
**▼** Circling NA NE of Rwy 19 and 31. Procedure NA at night. Visibility reduction by helicopters NA.  
**▲** When local altimeter setting not received, use Escanaba altimeter setting and increase all MDA 180 feet, and increase S-31 and Circling Cat B visibility ¼ mile and Cats C and D visibility ½ mile.

**MISSED APPROACH:** Climb to 3100 then left turn direct IMT VOR/DME and hold.

ASOS  
**119.025**

MINNEAPOLIS CENTER  
**121.25 322.5**

UNICOM  
**122.8 (CTAF) 0**



CATEGORY	A	B	C	D
S-31	1760-1 629 (600-1)		1760-1¾ 629 (600-1¾)	1760-2 629 (600-2)
CIRCLING	1760-1 578 (600-1)		1780-1¾ 1780-2 598 (600-1¾)	1780-2 598 (600-2)

IRON MOUNTAIN/KINGSFORD, MICHIGAN

Amdt 16 09351

IRON MOUNTAIN/FORD (IMT)

45°49'N - 88°07'W

**VOR RWY 31**

## IRONWOOD

## GOGEBIC—IRON CO

(IWD) 7 NE UTC-6(-5DT) N46°31.65' W90°07.88'

1230 B FUEL 100LL, JET A Class II, ARFF Index A NOTAM FILE IWD  
RWY 09-27: H6501X130 (ASPH-GRVD) S-85, D-150, 2S-175, 2D-280 HIRL

RWY 09: REIL. VASI(V4L)—GA 3.0° TCH 47'. Trees.

RWY 27: MALSR. Trees.

## RUNWAY DECLARED DISTANCE INFORMATION

RWY 09: TORA-6501 TODA-6501 ASDA-6501 LDA-6501

RWY 27: TORA-6501 TODA-6501 ASDA-6501 LDA-6501

**AIRPORT REMARKS:** Attended 1400-0200Z±. Be alert for PAEW during snow removal. Arpt signs may be snow covered during winter months. Arpt CLOSED to unscheduled air carrier ops with more than 30 passenger seats except 48 hr PPR call arpt manager 906-932-3121. Various wildlife on and in/ovf arpt. ACTIVATE HIRL Rwy 09-27; REIL Rwy 09; MALSR Rwy 27—CTAF. Ldg fee. Landing fees waived if fuel purchased. Firefighting personnel will be monitoring CTAF during all scheduled air carrier ops. Arpt will be monitoring CTAF during all scheduled air carrier ops to convey latest rwy conditions during winter wx.

**WEATHER DATA SOURCES:** AWOS-3 125.175 (906) 932-4039.

HIWAS 108.8 IWD.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

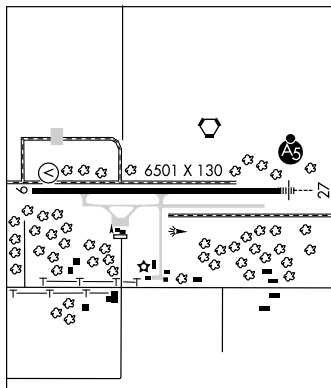
IRONWOOD RCO 122.3 (GREEN BAY RADIO)

® MINNEAPOLIS CENTER APP/DEP 133.55

**RADIO AIDS TO NAVIGATION:** NOTAM FILE IWD.

IRONWOOD (L) VORTACW 108.8 IWD Chan 25 N46°31.94' W90°07.55' at fld. 1230/1E. HIWAS.

ILS 111.5 I-IWD Rwy 27. Class II. Unmonitored.



GREEN BAY

H-2K, L-141

IAP

## ISHPEMING

## EDWARD F JOHNSON

(M61) 10 S UTC-5(-4DT) N46°20.71' W87°47.31'

1446 NOTAM FILE GRB

RWY 18-36: 2200X100 (TURF)

RWY 18: Trees.

RWY 36: Thld dsplcd 200'. Trees.

**AIRPORT REMARKS:** Unattended. CLOSED winter months Dec-Apr and when snow covered. Rwy 18-36 rough with sandy areas. Lgt 419' AGL twr located 6100' south of arpt and 600' right of extended centerline Rwy 18-36.

Rwy 18 marked with 3' yellow cones.

**COMMUNICATIONS:** CTAF 122.9

GREEN BAY

## JABLONSKI

(See NUNICA)

## JACK BARSTOW

(See MIDLAND)

LOC I-WVD <b>111.5</b>	APP CRS <b>270°</b>	Rwy Idg TDZE Apt Elev <b>6501</b> <b>1230</b> <b>1230</b>
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# ILS or LOC RWY 27

IRONWOOD/GOGEBIC-IRON COUNTY (IWD)

**NA** When local altimeter setting not received, use Ashland altimeter setting and increase all DA 132 feet and all MDA 140 feet, increase S-LOC 27 Cat C/D visibility ½ mile, Circling Cat A/B visibility ¼ mile and Circling Cat C ½ mile. For inoperative MALS, when using Ashland altimeter setting, increase S-ILS 27 all Cats visibility to 1.

MALS



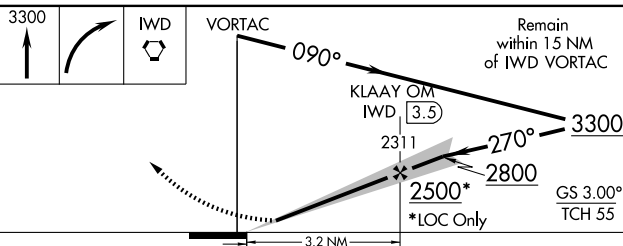
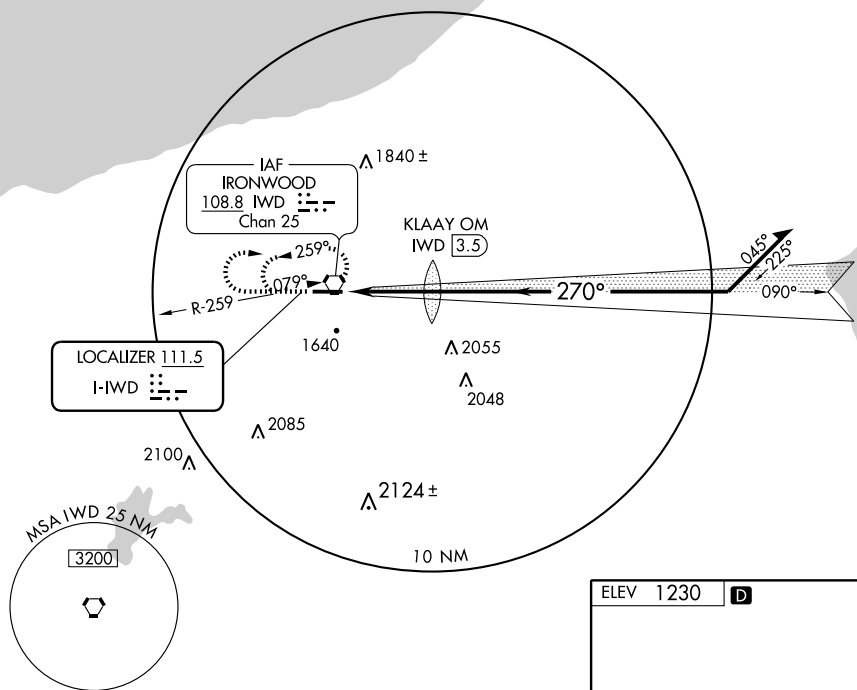
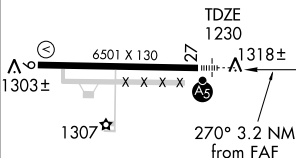
**MISSED APPROACH:** Climb to 3300, then right turn direct IWD VORTAC and hold.

AWOS-3  
**125.175**

MINNEAPOLIS CENTER  
**133.55**

GREEN BAY RADIO  
**122.3**

UNICOM  
**122.8** (CTAF) **U**

ELEV 1230 **D**

CATEGORY	A	B	C	D
S-ILS 27	1430-½ 200 (200-½)			
S-LOC-27	1720-½ 490 (500-½)	1720-¾ 490 (500-¾)	1720-1 490 (500-1)	
CIRCLING	2100-1 870 (900-1)	2100-1¼ 870 (900-1¼)	2100-2½ 870 (900-2½)	2220-3 990 (1000-3)

REIL Rwy 9 **U**  
HIRL Rwy 9-27 **U**

FAF to MAP 3.2 NM

Knots	60	90	120	150	180
Min:Sec	3:12	2:08	1:36	1:17	1:04

APP CRS	Rwy Idg	<b>6501</b>
<b>090°</b>	TDZE	<b>1230</b>
	Apt Elev	<b>1230</b>

**RNAV (GPS) RWY 9**

IRONWOOD/GOGEBIC-IRON COUNTY (IWD)

**▼** DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.

**▲** When local altimeter setting not received, use Ashland altimeter setting and increase all MDA 140 feet, increase LNAV Cat B visibility ¼ mile, Cat C/D ½ mile and increase Circling Cat A/B visibility ¼ mile, Cat C ½ mile.

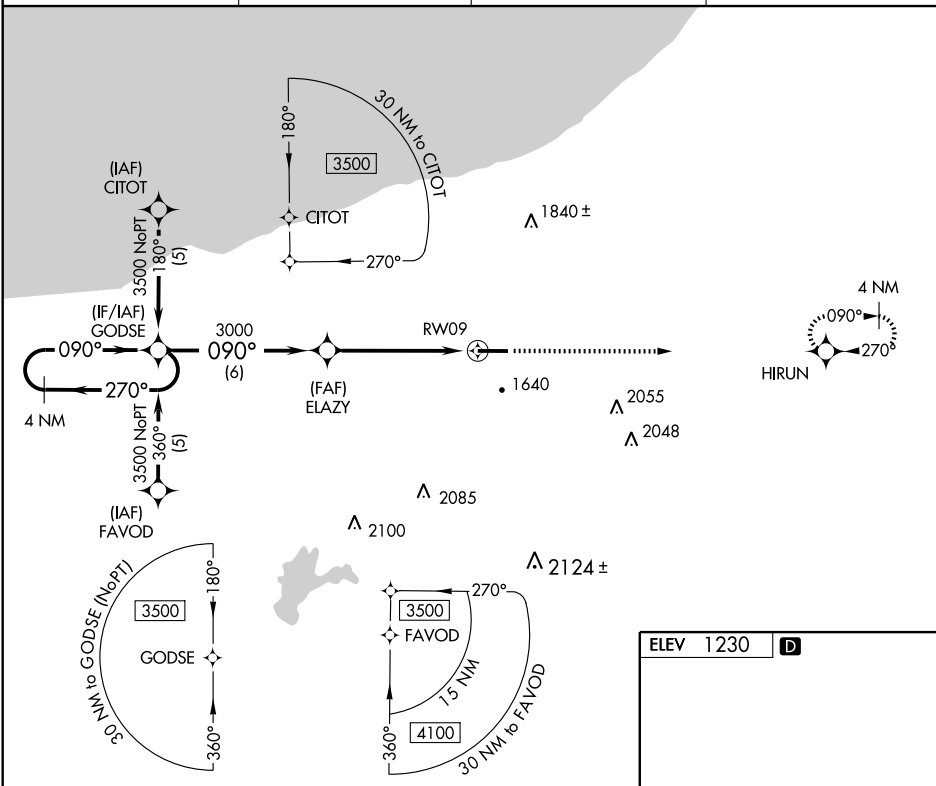
MISSED APPROACH: Climb to 3500 direct HIRUN and hold.

AWOS-3  
**125.175**

MINNEAPOLIS CENTER  
**133.55**

GREEN BAY RADIO  
**122.3**

UNICOM  
**122.8 (CTAF) 0**

ELEV 1230 **D**

4 NM  
Holding Pattern

GODSE

3500

HIRUN

090° to RW09

6501 X 130

1303±

TDZE 1230

1307

1318±

AS

RW09

2.1 NM to RW09

3.05° TCH 47

6 NM

3.3 NM

2.1

CATEGORY	A	B	C	D
LNAV MDA	1940-1	710 (800-1)	1940-2	1940-2 ¼
			710 (800-2)	710 (800-2 ¼)
CIRCLING	2100-1	2100-1 ¼	2100-2 ½	2220-3
	870 (900-1)	870 (900-1 ¼)	870 (900-2 ½)	990 (1000-3)

REIL Rwy 9 **0**  
HIRL Rwy 9-27 **0**



WAAS CH <b>50212</b> <b>W27A</b>	APP CRS <b>270°</b>	Rwy Idg TDZE <b>1230</b> Apt Elev <b>1230</b>	<b>6501</b>
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# RNAV (GPS) RWY 27

IRONWOOD/GOGEBIC-IRON COUNTY (IWD)

**▼** Inoperative table does not apply to LPV and LNAV/VNAV all Cats and LNAV Cats A and B.  
**▲** For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP-0.3 NA. When using Ashland altimeter setting: inoperative table does not apply to LNAV/VNAV all Cats and LNAV Cat A. When using Ashland altimeter setting: for inoperative MALS, increase LNAV Cat B visibility to 1 ¼ mile. Baro-VNAV and VDP NA when using Ashland altimeter setting. When local altimeter setting not received, use Ashland altimeter setting and increase all DA 132 feet and all MDA 140 feet, increase LNAV/VNAV Cat C visibility ¼ mile, LNAV Cat C/D visibility ½ mile, and Circling Cat A/B visibility ¼ mile, Cat C ½ mile.

MALS



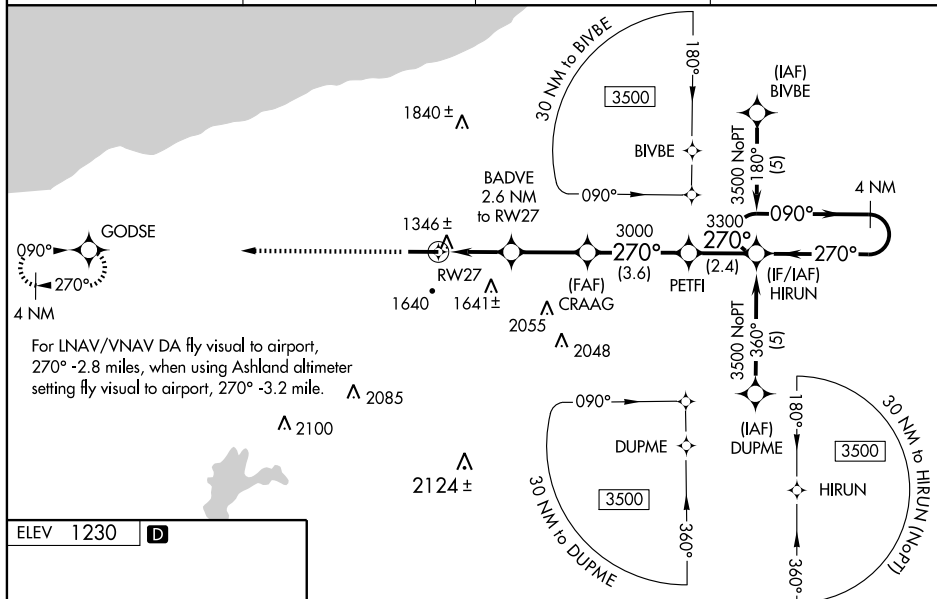
**MISSED APPROACH:**  
Climb to 3500 direct  
GODSE and hold.

AWOS-3  
**125.175**

MINNEAPOLIS CENTER  
**133.55**

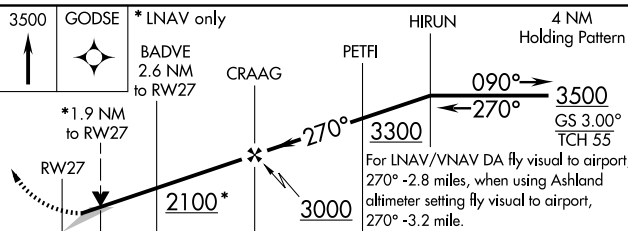
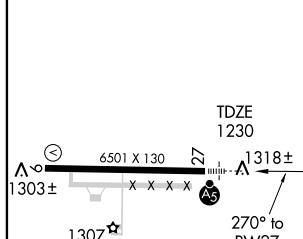
GREEN BAY RADIO  
**122.3**

UNICOM  
**122.8 (CTAF) 0**



ELEV 1230

D



CATEGORY	A	B	C	D
LPV DA	1430-1		200 (200-1)	
LNAV/VNAV DA	2166-2	936 (1000-2)	2166-2 3/4	2166-3
LNAV MDA	1900-1	670 (700-1)	1900-1 1/4	1900-1 1/2
CIRCLING	2100-1	2100-1 1/4	2100-2 1/2	2220-3

VORTAC IWD <b>108.8</b> Chan <b>25</b>	APP CRS <b>079°</b>	Rwy Idg TDZE Apt Elev	<b>6501</b> <b>1230</b> <b>1230</b>
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**VOR/DME RWY 9**

IRONWOOD/GOGEBIC-IRON COUNTY (IWD)

**Visibility reduction by helicopters NA.** When local altimeter setting not received, use Ashland altimeter setting and increase all MDA 140 feet, increase S-9 visibility Cat C ¼ mile, and Cat D ½ mile. Increase Circling visibility Cat A/B ¼ mile and Cat C ½ mile.

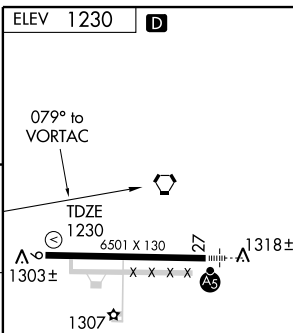
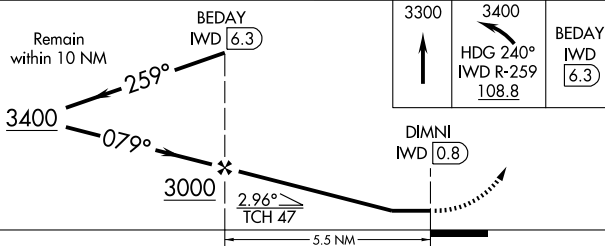
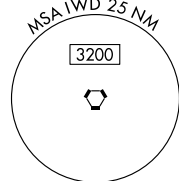
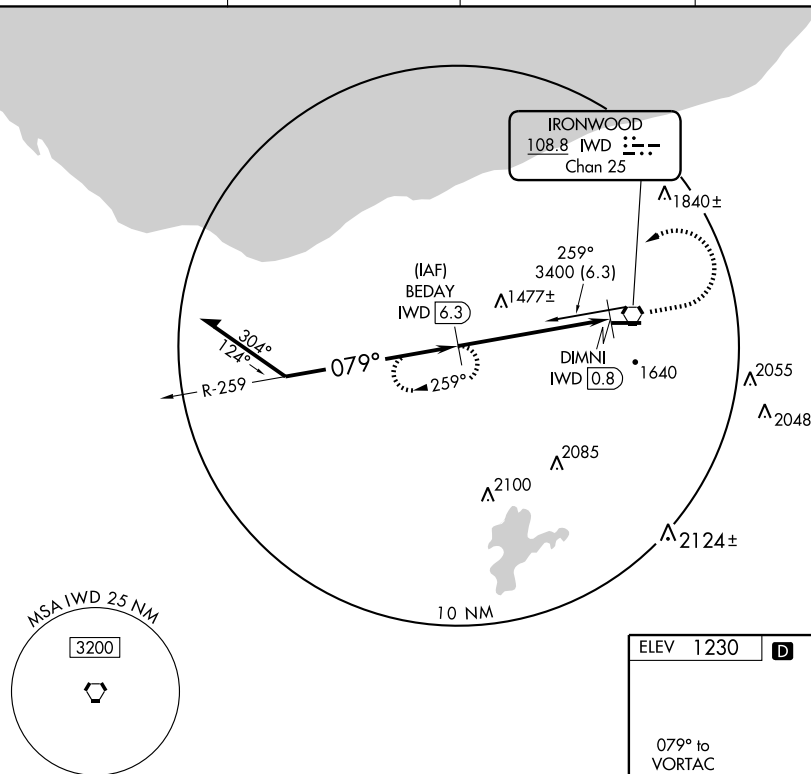
**MISSED APPROACH:** Climb to 3300 then climbing left turn to 3400 via heading 240° and IWD R-259 to BEDAY/6.3 DME and hold.

AWOS-3  
**125.175**

MINNEAPOLIS CENTER  
**133.55**

GREEN BAY RADIO  
**122.3**

UNICOM  
**122.8** (CTAF) **1**



CATEGORY	A	B	C	D
S-9	1740-1	510 (600-1)	1740-1½	510 (600-1½)
CIRCLING	2100-1 870 (900-1)	2100-1¼ 870 (900-1¼)	2100-2½ 870 (900-2½)	2220-3 990 (1000-3)

REIL Rwy 9 **1**  
HIRL Rwy 9-27 **1**

VORTAC IWD <b>108.8</b> Chan 25	APP CRS <b>283°</b>	Rwy Idg TDZE <b>1230</b> Apt Elev <b>1230</b>
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VOR/DME RWY 27

IRONWOOD/GOGEBIC-IRON COUNTY (IWD)

**⚠** For inoperative MALSR when using Ashland altimeter setting, increase S-27 Cat A visibility to 1 mile. When local altimeter setting not received, use Ashland altimeter setting and increase all MDA 140 feet, increase S-27 Cat A/B visibility ¼ mile, Cat C/D ½ mile, increase Circling Cat A/B visibility ¼ mile, Cat C ½ mile.

MALSR



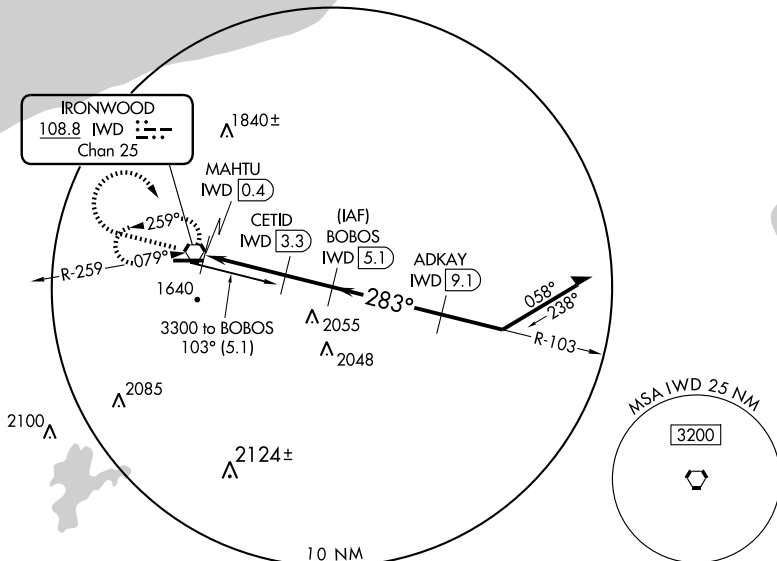
MISSED APPROACH: Climb to 3300 then right turn direct IWD VORTAC and hold.

AWOS-3  
**125.175**

MINNEAPOLIS CENTER  
**133.55**

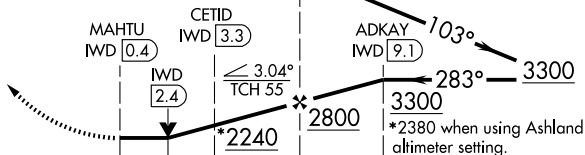
GREEN BAY RADIO  
**122.3**

UNICOM  
**122.8** (CTAF) **1**

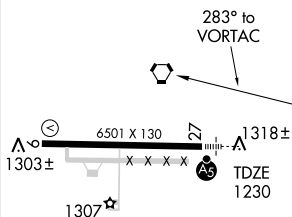


IWD  
**108.8**

BOBOS IWD **5.1**  
Remain within 10 NM



ELEV 1230

**D**

CATEGORY	A	B	C	D
S-27	1940-½	710 (800-½)	1940-1½	1940-1¾
CIRCLING	2100-1 870 (900-1)	2100-1¼ 870 (900-1¼)	2100-2½ 870 (900-2½)	2220-3 990 (1000-3)

REIL Rwy 9 **1**  
HIRL Rwy 9-27 **1**

## AIRPORT DIAGRAM

AL-861 (FAA)

JACKSON COUNTY-REYNOLDS FIELD (JXN)  
JACKSON, MICHIGAN

ATIS  
125.725  
JACKSON TOWER ★  
128.475 257.8  
GND CON  
121.9  
CLNC DEL  
121.9

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.  
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

42°16.0'N

42°15.5'N

42°15.0'N

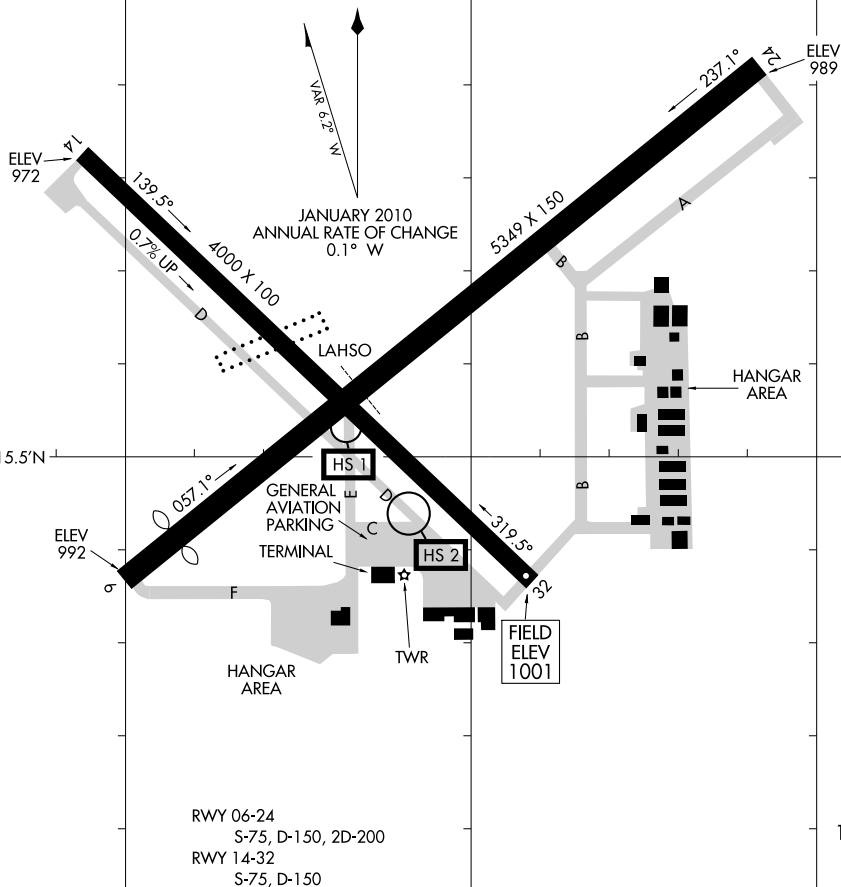
84°28.0'W

84°27.5'W

84°27.0'W

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010



## AIRPORT DIAGRAM

JACKSON, MICHIGAN  
JACKSON COUNTY-REYNOLDS FIELD (JXN)

**JACKSON CO—REYNOLDS FLD** (JXN) 2 W UTC-5(-4DT) N42°15.63' W84°27.63'

DETROIT

1001 B S4 FUEL 100LL, JET A NOTAM FILE JXN

H-10G, L-28J

RWY 06-24: H5349X150 (ASPH - GRVD) S-75, D-150, 2D-200 HIRL

IAP, AD

RWY 06: VASI(V4L)—GA 3.0° TCH 27'. Thld dsplcd 440'. Railroad.

RWY 24: MALSR. Trees.

RWY 14-32: H4000X100 (ASPH-GRVD) S-75, D-150 MIRL  
0.3% up SW

RWY 14: PAPI(P4L)—GA 3.0° TCH 25'. Trees.

RWY 32: REIL. PAPI(P4L)—GA 3.5° TCH 31'. Trees.

**LAND AND HOLD SHORT OPERATIONS**

LANDING	HOLD SHORT POINT	DIST AVBL
RWY 24	14-32	3406

AIRPORT REMARKS: Attended Apr-Oct 1200-0100Z†, Nov-Mar

1300-2300Z†. CAUTION: Deer and birds on and in/ovf arpt. Low altitude acft ops prohibited in/ovf prison 4 mi NE. When twr closed

ACTIVATE HIRL Rwy 06-24, MIRL Rwy 14-32; VASI Rwy 06, PAPI Rwy 14 and Rwy 32; REIL Rwy 32; MALSR Rwy 24—CTAF.

WEATHER DATA SOURCES: ASOS (517) 768-7506.

COMMUNICATIONS: CTAF 128.475 ATIS 125.725

UNICOM 122.95

RCO 122.2 (LANSING RADIO)

⑨ LANSING APP/DEP CON 127.3

TOWER 128.475 (1200-0200Z†) GND CON 121.9

CLNC DEL 121.9

AIRSPACE: CLASS D svc 1200-0200Z† other times CLASS E.

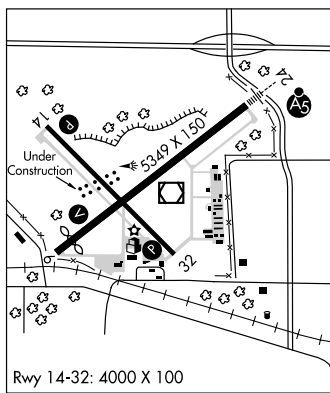
RADIO AIDS TO NAVIGATION: NOTAM FILE JXN.

(L) VORW/DME 109.6 JXN Chan 33 N42°15.55' W84°27.51' at fld. 995/5W.

VOR portion unusable 250°-310° byd 20 NM. DME portion unusable 075°-255° byd 10 NM blo 3000'.

JAKSO NDB (LOM) 212 JX N42°19.07' W84°21.93' 236° 5.5 NM to fld.

ILS 109.1 I-JXN Rwy 24 LOM JAKSO NDB. ILS and LOM unmonitored when twr clsd.

**JAKSO** N42°19.07' W84°21.93' NOTAM FILE JXN.

DETROIT

NDB (LOM) 212 JX 236° 5.5 NM to Jackson Co-Reynolds Fld. LOM unmonitored when twr clsd.

**JAMES CLEMENTS MUNI** (See BAY CITY)**JENISON****RIVERVIEW** (Ø8C) 3 NW UTC-5(-4DT) N42°56.20' W85°48.35'

CHICAGO

603 B FUEL 100LL NOTAM FILE LAN

L-28I

RWY 14-32: H3920X49 (ASPH) MIRL

RWY 14: Trees.

RWY 32: Thld dsplcd 1196'. Trees.

AIRPORT REMARKS: Attended Mon-Fri 1300-2200Z†, Sat-Sun irregularly. Fuel 24 hr self serve. Deer and birds on and in/ovf arpt. Rwy 14-32 trees and shrubs in transition zone both sides.

ACTIVATE MIRL Rwy 14-32—CTAF.  
COMMUNICATIONS: CTAF 122.9

RADIO AIDS TO NAVIGATION: NOTAM FILE MKG.

MUSKEGON (L) VORTACW 115.2 MKG Chan 99 N43°10.16'

W86°02.36' 145° 17.3 NM to fld. 659/1W. HIWAS.

**JERRY TYLER MEML** (See NILES)

## HOT SPOTS

An "airport surface hot spot" is a location on an aerodrome movement area with a history or potential risk of collision or runway incursion, and where heightened attention by pilots/drivers is necessary.

A "hot spot" is a runway safety related problem area on an airport that presents increased risk during surface operations. Typically it is a complex or confusing taxiway/taxiway or taxiway/runway intersection. The area of increased risk has either a history of or potential for runway incursions or surface incidents, due to a variety of causes, such as but not limited to: airport layout, traffic flow, airport marking, signage and lighting, situational awareness, and training. Hot spots are depicted on airport diagrams as open circles or polygons designated as "HS 1", "HS 2", etc. and tabulated in the list below with a brief description of each hot spot. Hot spots will remain charted on airport diagrams until such time the increased risk has been reduced or eliminated.

CITY/AIRPORT	HOT SPOT	DESCRIPTION*
DETROIT, MI		
DETROIT METROPOLITAN		
WAYNE COUNTY (DTW)	HS 1	Rwy 04R-22L and Rwy 09L-27R.
	HS 2	Rwy 03L-21R and Rwy 09L-27R.
	HS 3	Twy F and Rwy 03L-21R.
DETROIT, MI		
WILLOW RUN (YIP)	HS 1	Complex rwys/twy int.
	HS 2	Twy E1 to Rwy 27 or Rwy 23L wrong rwy departure risk.
JACKSON, MI		
JACKSON COUNTY-		
REYNOLDS FIELD (JXN)	HS 1	Confusing signage.
	HS 2	No signage.
KALAMAZOO, MI		
KALAMAZOO/BATTLE		
CREEK INTL (AZO)	HS 1	Complex rwy/twy int.
	HS 2	Wrong rwy departure risk from Twy C.
	HS 3	Wrong rwy departure risk from Twy F.

\*See appropriate A/FD, Alaska or Pacific Supplement HOT SPOT table for additional information.

LOC I-JXN <b><u>109.1</u></b>	APP CRS <b>236°</b>	Rwy Idg TDZE Apt Elev	<b>5349</b> <b>999</b> <b>1001</b>
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## ILS or LOC RWY 24

JACKSON COUNTY-REYNOLDS FIELD (JXN)

**T** When local altimeter setting not received, use Mason altimeter setting and increase all DA 54 feet and all MDA 60 feet, increase S-LOC 24 Cat C and Circling Cat D visibility  $\frac{1}{4}$  mile.

MALSR



**MISSED APPROACH:** Climb to 1400, then climbing right turn to 3000 via JXN R-270 to ECKDO Int/JXN 12.9 DME and hold.

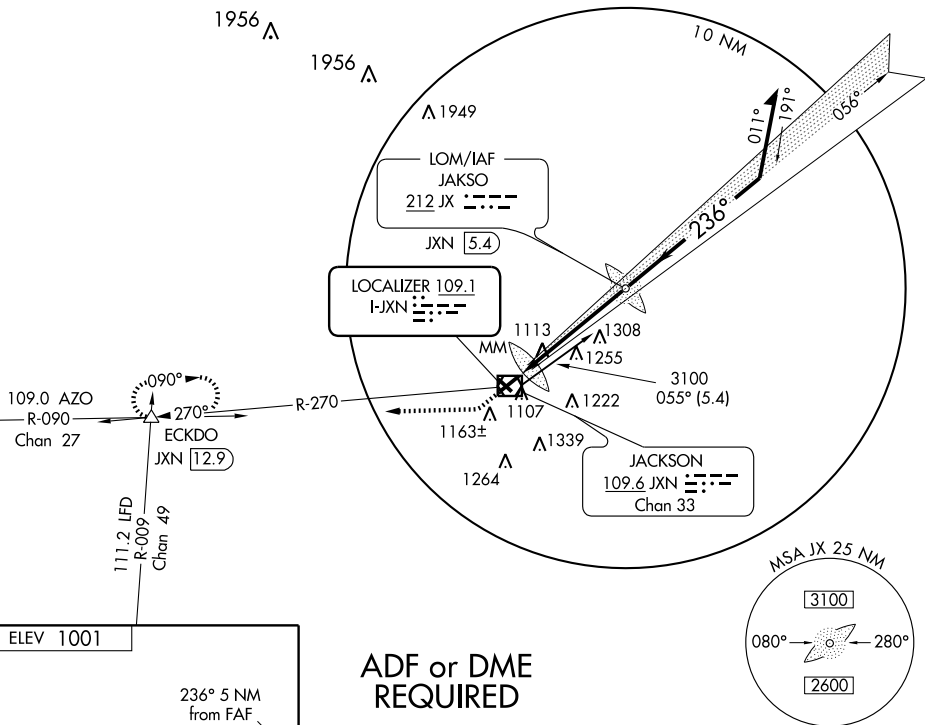
ATIS  
**125.725**

LANSGING APP CON  
127.3 357.6

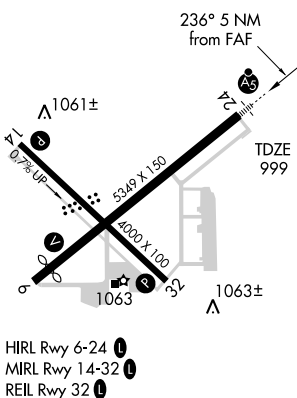
JACKSON TOWER★  
128.475 (CTAF) **L** 257.8

GND CON  
**121.9**

CLNC DEL  
**121.9**

UNICOM  
122.95

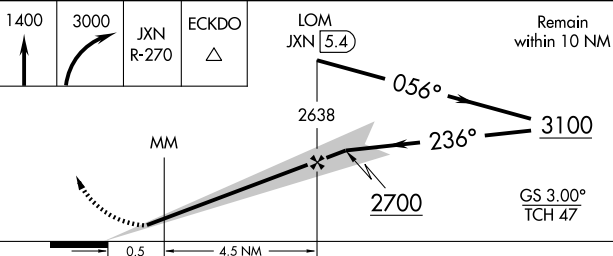
ADF or DME  
REQUIRED



HIRL Rwy 6-24 **L**  
MIRL Rwy 14-32 **L**  
REIL Rwy 32 **L**

FAF to MAP 5 NM

Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40



CATEGORY	A	B	C	D
S-ILS 24	1199-1/2 200 (200-1/2)			
S-LOC 24	1440-1/2	441 (500-1/2)	1440-3/4 441 (500-3/4)	1440-1 441 (500-1)
CIRCLING	1520-1	519 (600-1)	1520-1 1/2 519 (600-1 1/2)	1640-2 639 (700-2)

JACKSON, MICHIGAN

Amdt 14A 03JUN10

JACKSON COUNTY-REYNOLDS FIELD (JXN)

42°16'N - 84°28'W

## ILS or LOC RWY 24

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1. 23 SEP 2010 to 21 OCT 2010

## LAND AND HOLD SHORT OPERATIONS (LAHSO)

LAHSO is an acronym for "Land and Hold Short Operations." These operations include landing and holding short of an intersection runway, an intersecting taxiway, or other predetermined points on the runway other than a runway or taxiway. Measured distance represents the available landing distance on the landing runway, in feet.

Specific questions regarding these distances should be referred to the air traffic manager of the facility concerned. The Aeronautical Information Manual contains specific details on hold-short operations and markings.

CITY/AIRPORT	LDG RWY	HOLD-SHORT POINT	MEASURED DISTANCE
BATTLE CREEK, MI W.K. KELLOGG (BTL)	05	13-31	7,000 feet
DETROIT, MI COLEMAN A. YOUNG MUNI (DET)	15	07-25	4,900 feet
FLINT, MI BISHOP INTL (FNT)	09 36	18-36 09-27	4,100 feet 6,300 feet
JACKSON, MI JACKSON COUNTY-REYNOLDS FIELD (JXN)	24	14-32	3,406 feet
TRAVERSE CITY, MI CHERRY CAPITAL (TVC)	18 28 28	10-28 18-36 18-36	2,850 feet 5,500 feet 5,500 feet

23 SEP 2010 to 21 OCT 2010

23 SEP 2010 to 21 OCT 2010



LOM JX <b><u>212</u></b>	APP CRS <b>236°</b>	Rwy Idg <b>5349</b> TDZE <b>999</b> Apt Elev <b>1001</b>
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NDB RWY 24

JACKSON COUNTY-REYNOLDS FIELD (JXN)



**MISSED APPROACH:** Climbing right to 3000 via JXN R-270 to ECKDO Int/JXN 12.9 DME and hold.

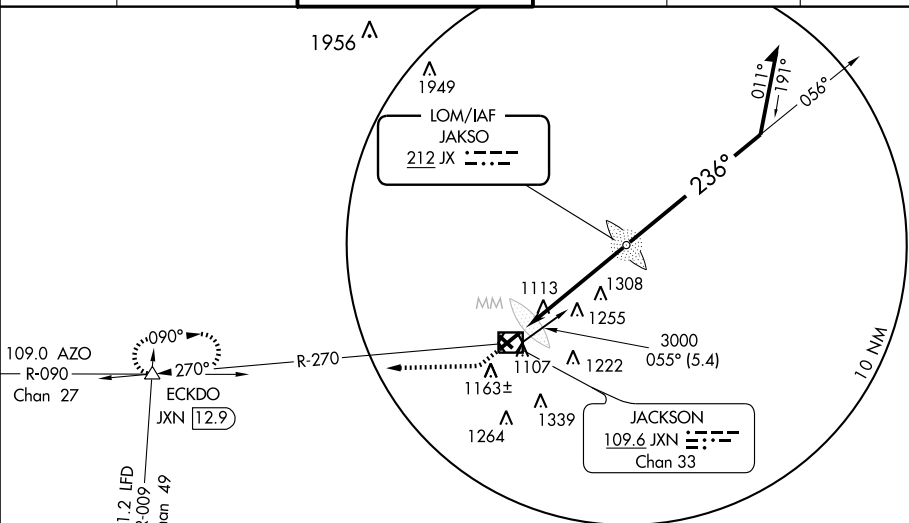
ATIS  
**125.725**

LANSING APP CON  
127.3 357.6

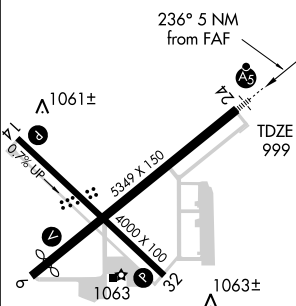
JACKSON TOWER★  
128.475(CTAF) 257.8

GND CON  
**121.9**

CLNC DEL  
**121.9**

UNICOM  
122.95

ELEV 1001

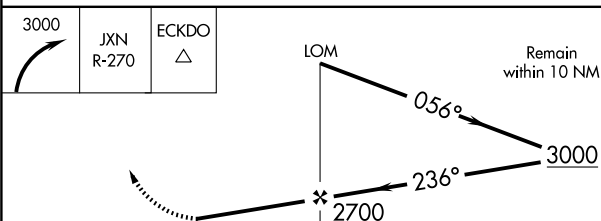


HIRL Rwy 6-24 **L**  
MIRL Rwy 14-32 **L**  
REIL Rwy 32 **L**

FAF to MAP 5 NM

Knots	60	90	120	150	180
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Min:Sec	5:00	3:20	2:30	2:00	1:40
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CATEGORY	A	B	C	D
S-24	1660-3/4	661 (700-3/4)	1660-1 1/4 661 (700-1 1/4)	1660-1 3/4 661 (700-1 3/4)
CIRCLING	1660-1	659 (700-1)	1660-1 3/4 659 (700-1 3/4)	1660-2 659 (700-2)

JACKSON, MICHIGAN

Amdt 14 10210

JACKSON COUNTY-REYNOLDS FIELD (JXN)

42°16'N - 84°28'W

NDB RWY 24

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1. 23 SEP 2010 to 21 OCT 2010

APP CRS  
**056°**

Rwy Idg **4909**  
TDZE **999**  
Apt Elev **1001**

# RNAV (GPS) RWY 6

JACKSON COUNTY-REYNOLDS FIELD (JXN)

**▽** DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Mason altimeter setting and increase all MDA 60 feet, increase all Cat C/D visibilities ¼ mile.

**▲**

MISSED APPROACH: Climb to 3100  
direct IGLAW and hold.

ATIS  
**125.725**

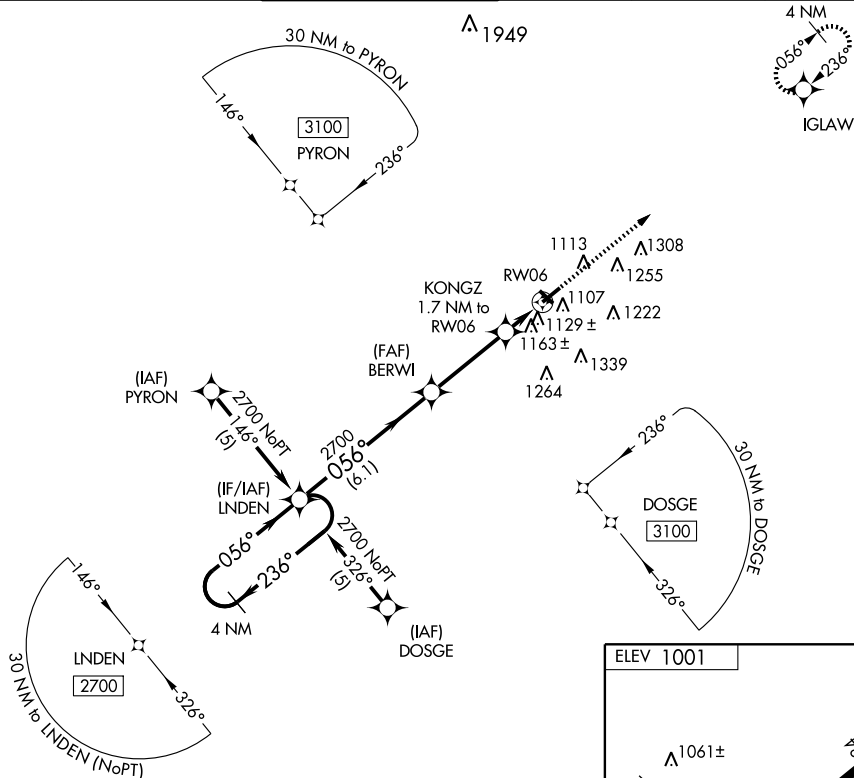
LANSING APP CON  
**127.3 357.6**

JACKSON TOWER ★  
**128.475 (CTAF) 0 257.8**

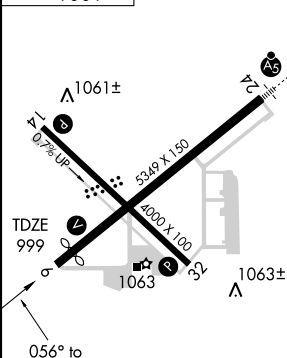
GND CON  
**121.9**

CLNC DEL  
**121.9**

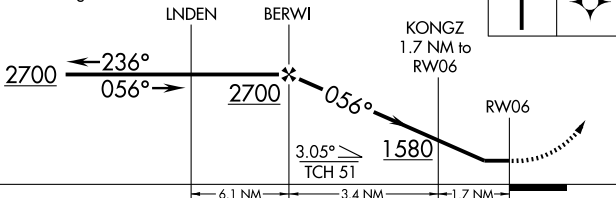
UNICOM  
**122.95**



ELEV 1001



4 NM  
Holding Pattern



CATEGORY	A	B	C	D
LNAV MDA	1380-1 381 (400-1)			1380-1¼ 381 (400-1¼)
CIRCLING	1520-1 519 (600-1)		1520-1½ 519 (600-1½)	1640-2 639 (700-2)

HIRL Rwy 6-24 **0**  
MIRL Rwy 14-32 **0**  
REIL Rwy 32 **0**

APP CRS	Rwy Idg	4000
138°	TDZE	996
	Apt Elev	1001

## RNAV (GPS) RWY 14

JACKSON COUNTY-REYNOLDS FIELD (JXN)

- T** DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.  
**A** When local altimeter setting not received, use Mason altimeter setting and increase all MDA 60 feet, increase all Cat C/D visibilities  $\frac{1}{4}$  mile.

MISSED APPROACH: Climb to 3100  
direct JERIK and hold.

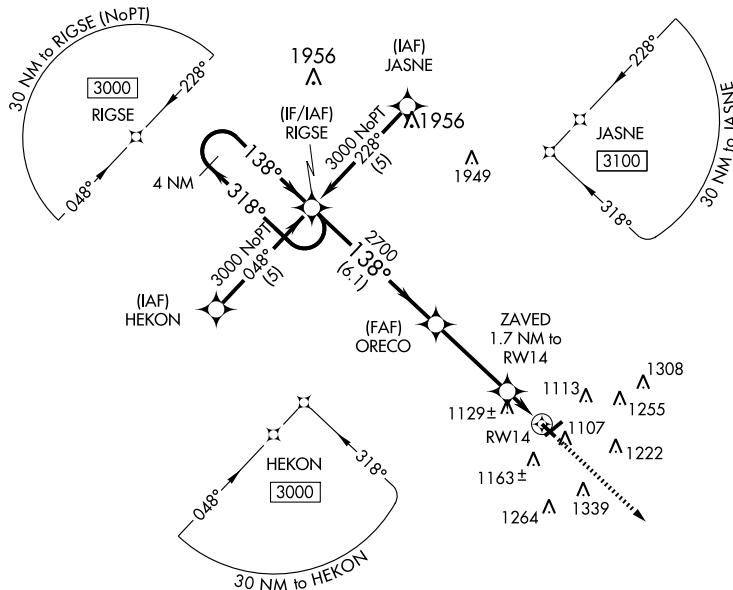
ATIS  
**125.725**

LANsing APP CON  
127.3 357.6

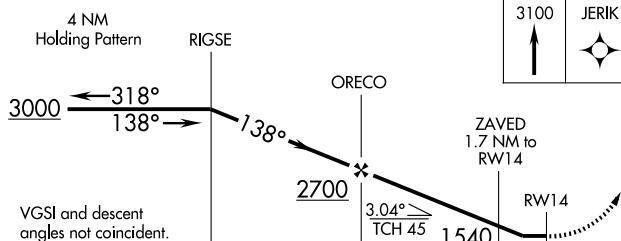
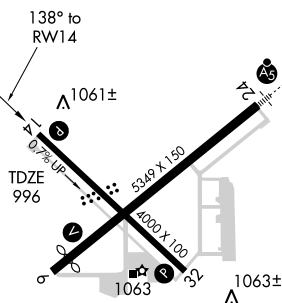
JACKSON TOWER★  
128.475 (CTAF) **L** 257.8

GND CON  
**121.9**

CLNC DEL  
**121,9**

UNICOM  
122.95

ELEV 1001



		6.1 NM	3.5 NM	1.7	
CATEGORY	A	B	C	D	
LNAV MDA	1380-1 384 (400-1)			1380-1¼ 384 (400-1¼)	
CIRCLING	1520-1 519 (600-1)		1520-1½ 519 (600-1½)	1640-2 639 (700-2)	

JACKSON, MICHIGAN  
Orig 22OCT09

JACKSON COUNTY-REYNOLDS FIELD (JXN)

# RNAV (GPS) RWY 14

42°16'N - 84°28'W

EC-1. 23 SEP 2010 to 21 OCT 2010

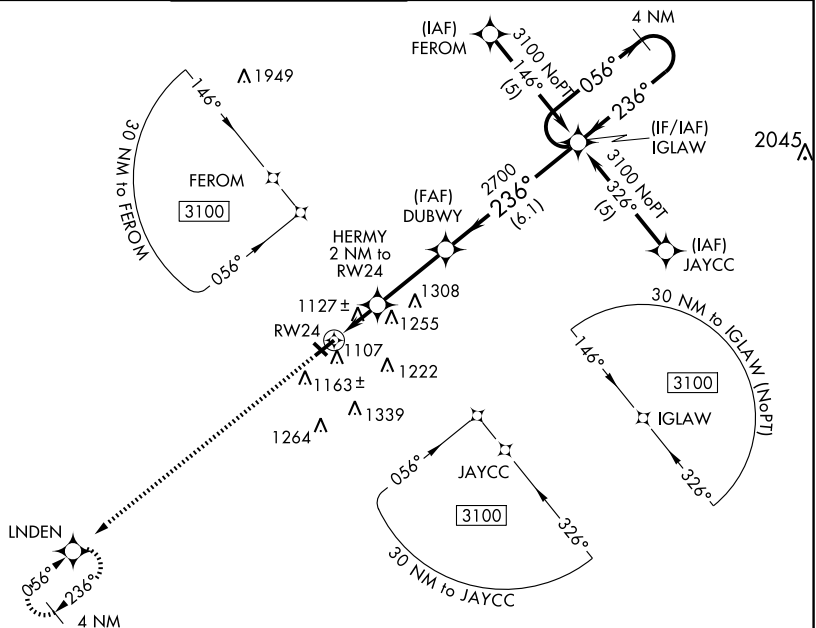
EC-1, 23 SEP 2010 to 21 OCT 2010

WAAS CH <b>82212</b> <b>W24A</b>	APP CRS <b>236°</b>	Rwy Idg <b>5349</b> TDZE <b>999</b> Apt Elev <b>1001</b>
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## RNAV (GPS) RWY 24

JACKSON COUNTY-REYNOLDS FIELD (JXN)

<div><div>⚠</div><div>⚠</div></div>	Baro-VNAV NA when using Mason altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 47°C (116°F) DME/DME RNP-0.3 NA. When local altimeter setting not received, use Mason altimeter setting and increase all DA 54 feet, all MDA 60 feet. Increase LNAV/VNAV all Cats, LNAV and circling Cat C/D visibility ¼ mile.					<div>MALSR</div> <div><div>A5</div><div><div></div><div></div><div></div></div></div>	MISSED APPROACH: Climb to 2700 direct LNDEN and hold.
ATIS 125.725	LANSING APP CON 127.3 357.6		JACKSON TOWER* 128.475 (CTAF) 0 257.8	GND CON 121.9	CLNC DEL 121.9	UNICOM 122.95	

[illegible]

APP CRS <b>318°</b>	Rwy Idg <b>4000</b>
	TDZE <b>1001</b>
	Apt Elev <b>1001</b>

# RNAV (GPS) RWY 32

## JACKSON COUNTY-REYNOLDS FIELD (JXN)

**▽** DME/DME RNP -0.3 NA. Visibility reduction by helicopters NA.  
**▲** When local altimeter setting not received, use Mason altimeter setting and increase all MDA 60 feet, increase all Cat C/D visibilities ¼ mile.

MISSED APPROACH: Climb to 3000 direct RIGSE and hold.

ATIS  
**125.725**

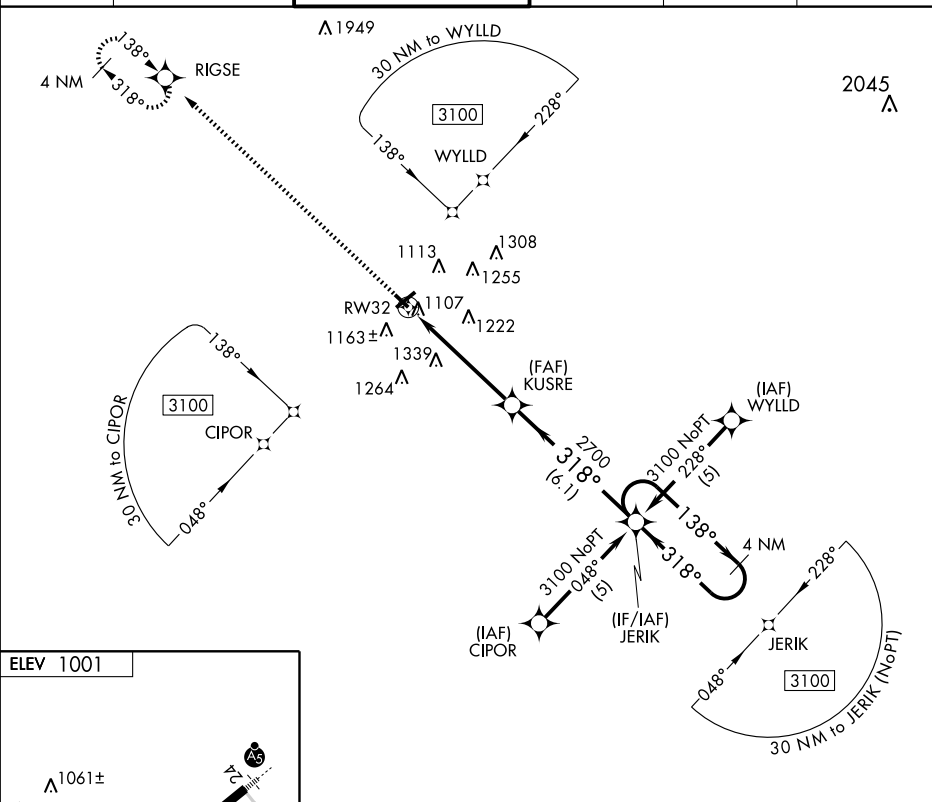
LANSING APP CON  
**127.3 357.6**

JACKSON TOWER ★  
**128.475 (CTAF) 0 257.8**

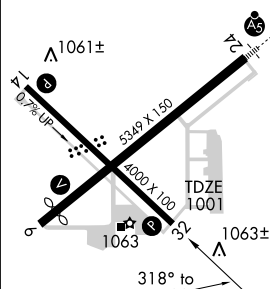
GND CON  
**121.9**

CLNC DEL  
**121.9**

UNICOM  
**122.95**

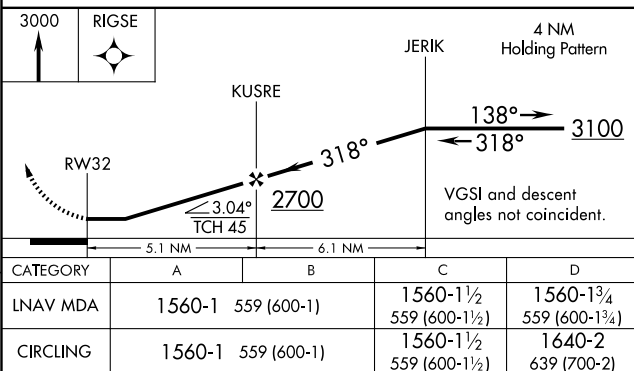


ELEV 1001



HIRL Rwy 6-24  
MIRL Rwy 14-32  
REIL Rwy 32

JACKSON, MICHIGAN  
Orig 22OCT09



42°16'N - 84°28'W

# RNAV (GPS) RWY 32

VOR/DME JXN <b>109.6</b> Chan <b>33</b>	APP CRS <b>231°</b>	Rwy Idg TDZE Apt Elev <b>5349</b> <b>999</b> <b>1001</b>
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## VOR/DME RWY 24

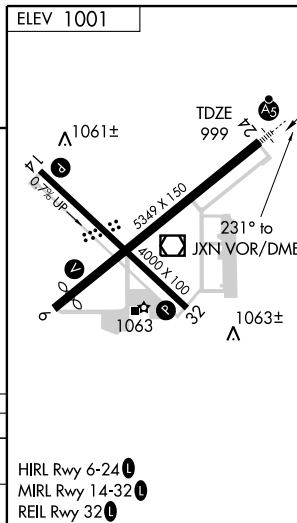
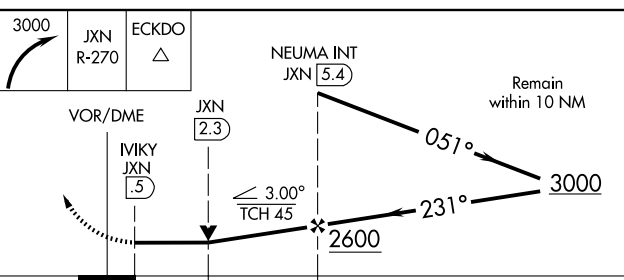
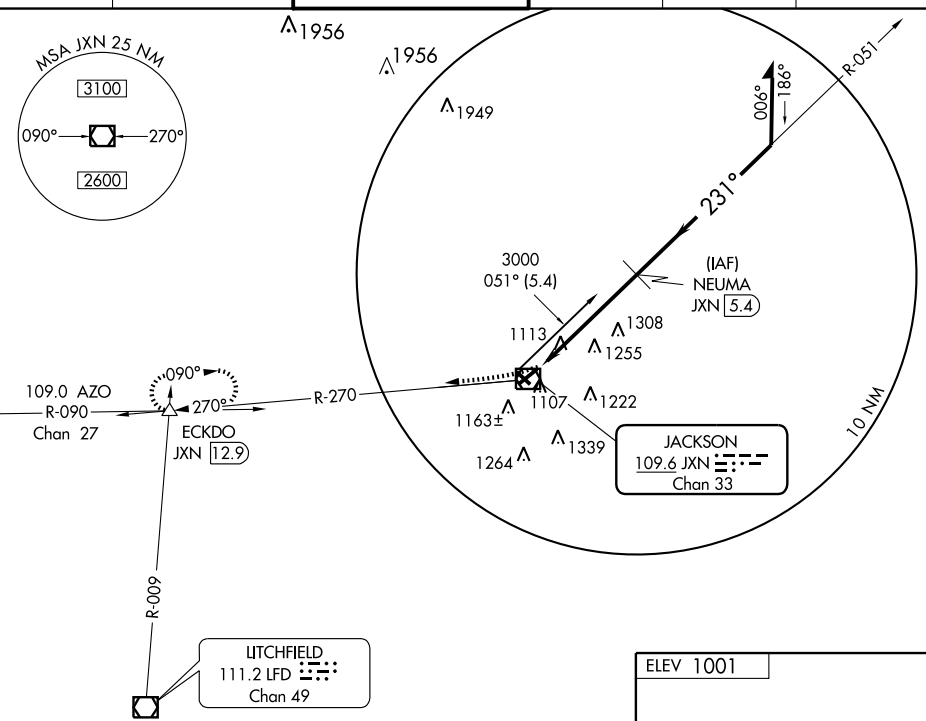
JACKSON COUNTY-REYNOLDS FIELD (JXN)

When local altimeter setting not received, use Mason altimeter setting and increase all MDA 60 feet, increase all Cat C/D visibilities ¼ mile. VDP NA when using Mason altimeter setting.



MISSED APPROACH: Climbing right turn to 3000 via JXN R-270 to ECKDO Int/JXN 12.9 DME and hold.

ATIS <b>125.725</b>	LANSING APP CON <b>127.3 357.6</b>	JACKSON TOWER ★ <b>128.475 (CTAF) 0 257.8</b>	GND CON <b>121.9</b>	CLNC DEL <b>121.9</b>	UNICOM <b>122.95</b>
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CATEGORY	A	B	C	D
S-24	1620-½ 621 (700-½)		1620-1¼ 621 (700-1¼)	1620-1½ 621 (700-1)
CIRCLING	1620-1 619 (700-1)		1620-1¾ 619 (700-1¾)	1640-2 639 (700-2)

HIRL Rwy 6-24  
MIRL Rwy 14-32  
REIL Rwy 32

VOR/DME JXN <b>109.6</b> Chan <b>33</b>	APP CRS <b>062°</b>	Rwy Idg TDZE <b>999</b> Apt Elev <b>1001</b>	<b>4909</b> <b>999</b> <b>1001</b>
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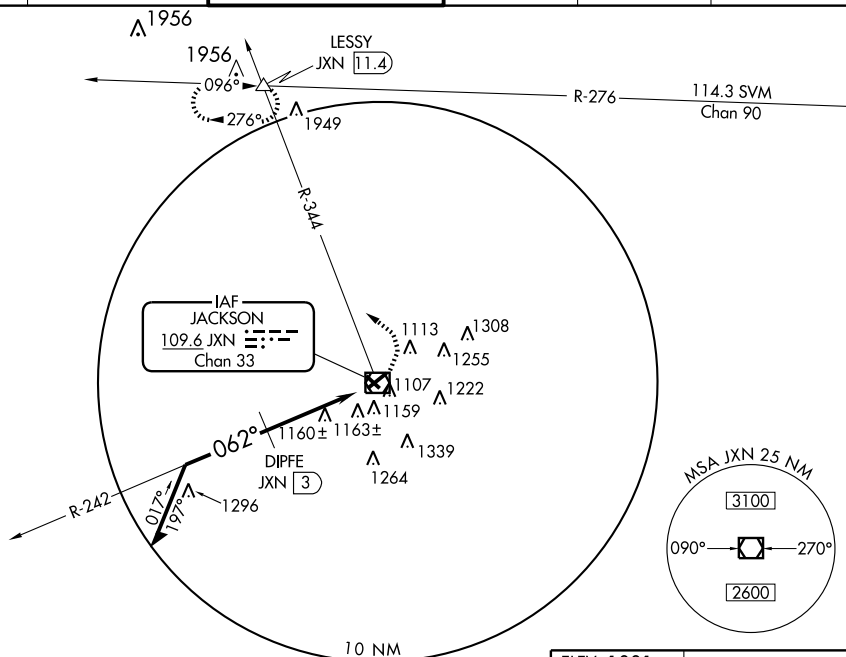
**VOR RWY 6**

JACKSON COUNTY-REYNOLDS FIELD (JXN)

▼ Visibility reduction by helicopters NA. When local altimeter setting not received, use Mason altimeter setting and increase all MDA 60 feet. Increase all Cat C/D visibilities ¼ mile.

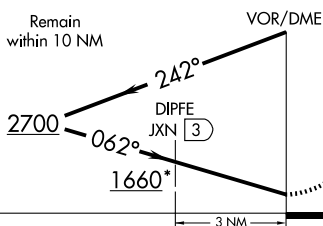
MISSED APPROACH: Climbing left turn to 3000 via JXN R-344 to LESSY Int/JXN 11.4 DME and hold.

ATIS <b>125.725</b>	LANSING APP CON <b>127.3 357.6</b>	JACKSON TOWER ★ <b>128.475 (CTAF) 0 257.8</b>	GND CON <b>121.9</b>	CLNC DEL <b>121.9</b>	UNICOM <b>122.95</b>
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ELEV 1001

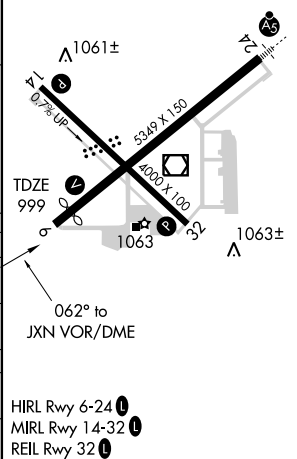
Remain within 10 NM



3000  
JXN R-344  
LESSY

\*1720 when using Mason altimeter setting.

CATEGORY	A	B	C	D
S-6	1660-1 661 (700-1)		1660-1¾ 661 (700-1¾)	1660-2 661 (700-2)
CIRCLING	1660-1 659 (700-1)		1660-1¾ 659 (700-1¾)	1660-2 659 (700-2)
DIPFE MINIMUMS				
S-6	1460-1 461 (500-1)		1460-1¼ 461 (500-1¼)	1460-1½ 461 (500-1½)
CIRCLING	1520-1 519 (600-1)		1520-1½ 519 (600-1½)	1640-2 639 (700-2)



HIRL Rwy 6-24  
MIRL Rwy 14-32  
REIL Rwy 32

VOR/DME JXN <b>109.6</b> Chan <b>33</b>	APP CRS <b>133°</b>	Rwy Idg TDZE Apt Elev <b>1001</b>
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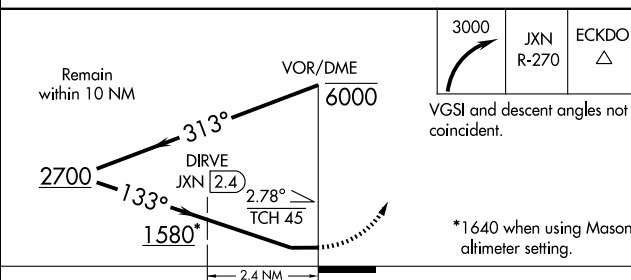
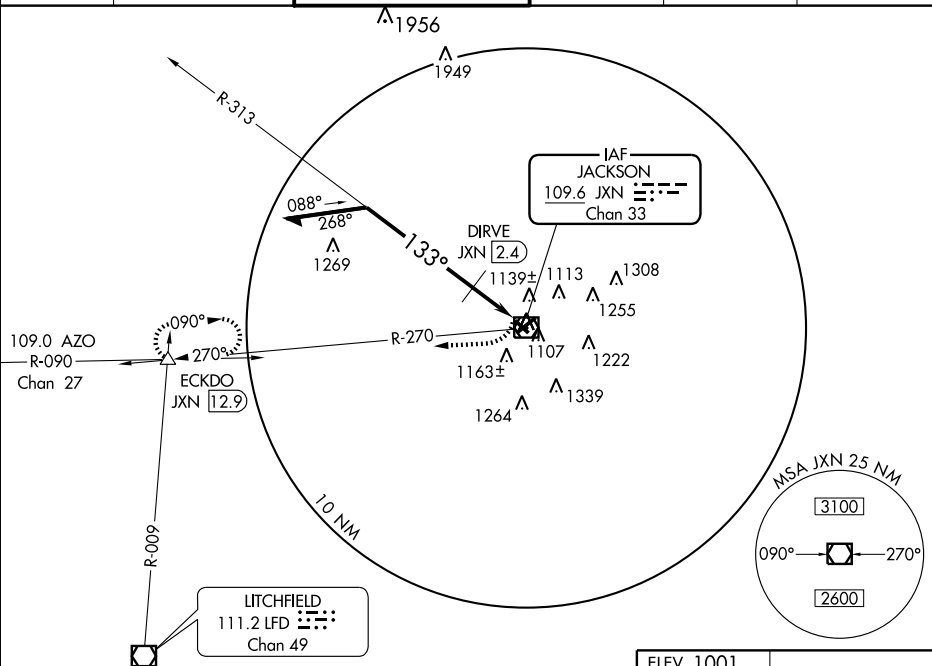
**VOR RWY 14**

JACKSON COUNTY-REYNOLDS FIELD (JXN)

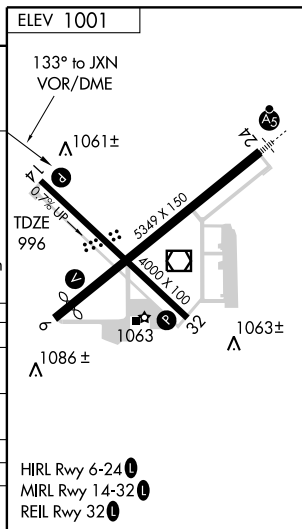
▼ Visibility reduction by helicopters NA. When local altimeter setting not received, use Mason altimeter setting and increase all MDA 60 feet, increase all Cat C/D visibilities ¼ mile.

MISSED APPROACH: Climbing right turn to 3000 via JXN R-270 to ECKDO Int/JXN 12.9 DME and hold.

ATIS <b>125.725</b>	LANSING APP CON <b>127.3 357.6</b>	JACKSON TOWER ★ <b>128.475(CTAF) 257.8</b>	GND CON <b>121.9</b>	CLNC DEL <b>121.9</b>	UNICOM <b>122.95</b>
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CATEGORY	A	B	C	D
S-14	1580-1 584 (600-1)	1580-1½ 584 (600-1½)	1580-1¾ 584 (600-1¾)	
CIRCLING	1580-1 579 (600-1)	1580-1½ 579 (600-1½)	1640-2 639 (700-2)	
DIRVE MINIMUMS				
S-14	1400-1 404 (400-1)	1400-1¼ 404 (400-1¼)		
CIRCLING	1520-1 519 (600-1)	1520-1½ 519 (600-1½)	1640-2 639 (700-2)	





VOR/DME JXN  
**109.6**  
Chan **33**

APP CRS  
**325°**

Rwy ldg  
TDZE  
Apt Elev  
**4000**  
**1001**  
**1001**

**VOR RWY 32**

JACKSON COUNTY-REYNOLDS FIELD (JXN)

▼ Visibility reduction by helicopters NA. When local altimeter setting not received, use Mason altimeter setting and increase all MDA 60 feet, increase all Cat C/D visibilities ¼ mile.

▲

MISSED APPROACH: Climb to 3000 via JXN  
R-344 to LESSY Int/JXN 11.4 DME and hold.

ATIS  
**125.725**

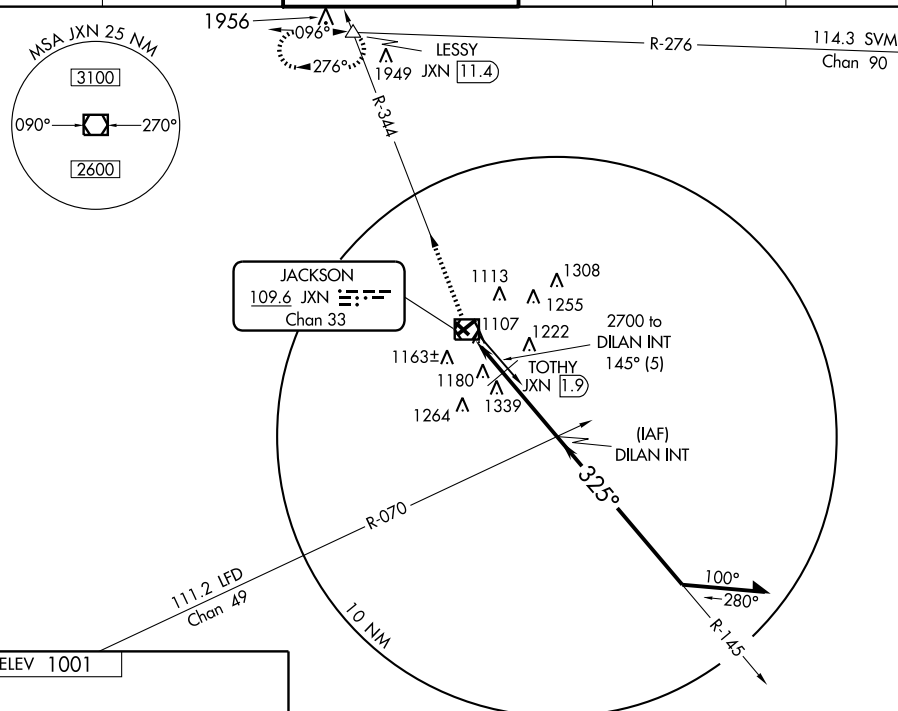
LANSING APP CON  
**127.3 357.6**

JACKSON TOWER ★  
**128.475(CTAF) 257.8**

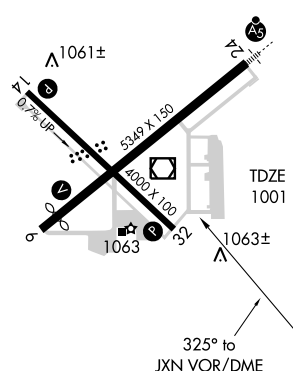
GND CON  
**121.9**

CLNC DEL  
**121.9**

UNICOM  
**122.95**



ELEV 1001



HIRL Rwy 6-24 (1)  
MRL Rwy 14-32 (1)  
REL Rwy 32 (1)

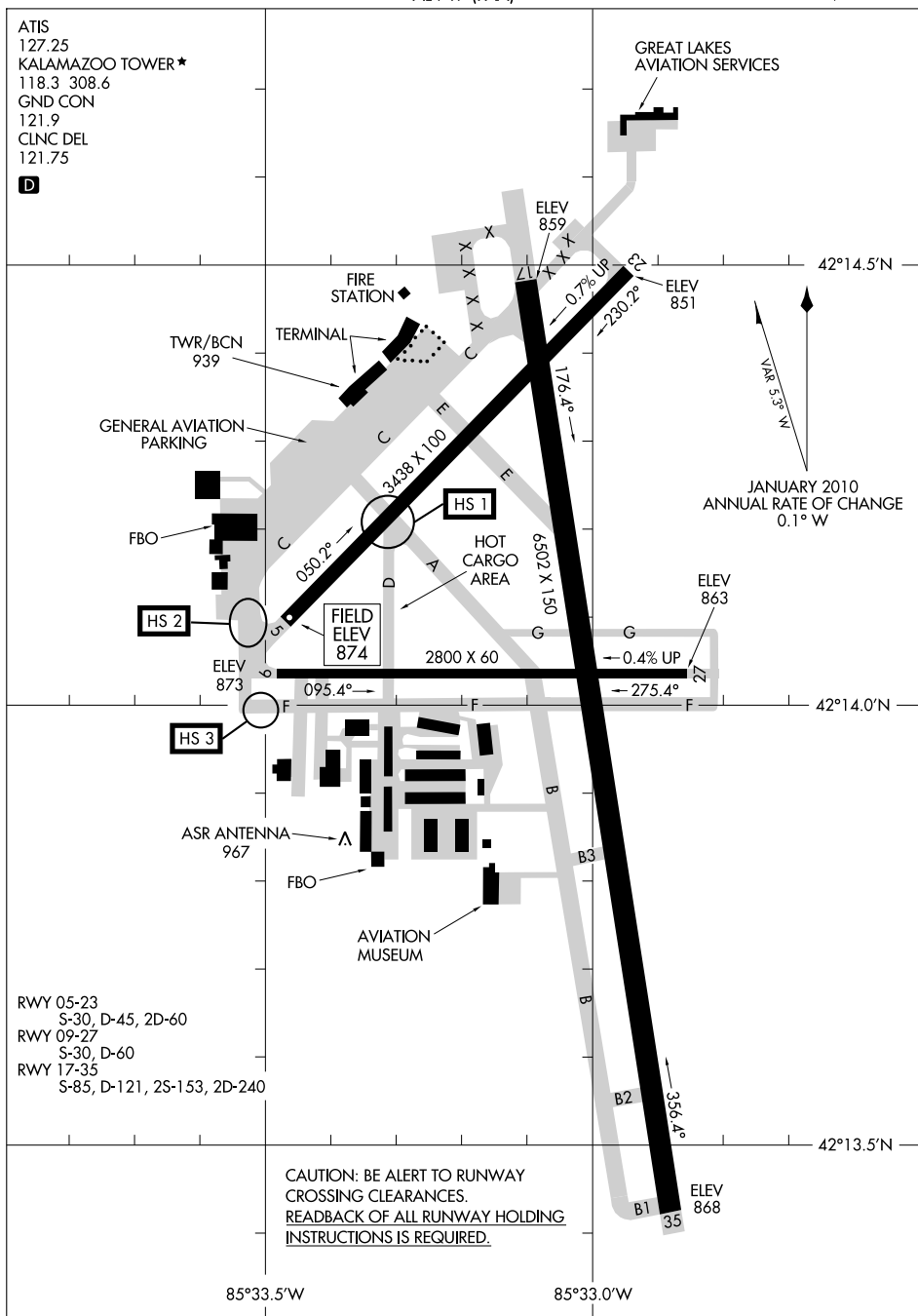
3000	JXN R-344	LESSY	TOTHY JXN 1.9	DILAN INT	Remain within 10 NM
				≤ 3.04° TCH 45°	2700
				325° * 2600	
				VGSIs and descent angles not coincident. *1660 when using Mason altimeter setting.	
				1.7	3.1 NM
CATEGORY	A	B	C	D	
S-32	1600-1	599 (600-1)	1600-1½ 599 (600-1½)	1600-1¾ 599 (600-1¾)	
CIRCLING	1600-1	599 (600-1)	1600-1½ 599 (600-1½)	1640-2 639 (700-2)	
TOTHY MINIMUMS					
S-32	1460-1	459 (500-1)	1460-1¼ 459 (500-1¼)	1460-1½ 459 (500-1½)	
CIRCLING	1520-1	519 (600-1)	1520-1½ 519 (600-1½)	1640-2 639 (700-2)	

## AIRPORT DIAGRAM

AL-717 (FAA)

KALAMAZOO/ BATTLE CREEK INTL (AZO)  
KALAMAZOO, MICHIGAN

EC-1, 23 SEP 2010 to 21 OCT 2010



EC-1, 23 SEP 2010 to 21 OCT 2010

## AIRPORT DIAGRAM

KALAMAZOO, MICHIGAN  
KALAMAZOO/ BATTLE CREEK INTL (AZO)

## KALAMAZOO

KALAMAZOO/BATTLE CREEK INTL (AZO) 3 SE UTC-5(-4DT) N42°14.06' W85°33.09'

CHICAGO

874 B S4 FUEL 100LL, JET A OX 1, 3 TPA-1674(800) NOTAM FILE AZO

H-5E, 10F, L-281

LRA Class I, ARFF Index B

IAP, AD

RWY 17-35: H6502X150 (ASPH-GRVD) S-85, D-121, 2S-153, 2D-240 HIRL

RWY 17: REIL. PAPI(P4L)—TCH 45'. Trees.

RWY 35: MALSR. PAPI(P4L)—GA 3.0° TCH 53'. Railroad.

RWY 05-23: H3438X100 (ASPH-GRVD) S-30, D-45, 2D-60

MIRL 0.7% up SW

RWY 05: REIL. PAPI(P4L)—GA 3.0° TCH 28'. Pole.

RWY 23: REIL. PAPI(P4L)—GA 3.5° TCH 34'. Tree.

RWY 09-27: H2800X60 (ASPH) S-30, D-60 MIRL 0.4% up W

RWY 09: Tree.

RWY 27: Railroad.

## RUNWAY DECLARED DISTANCE INFORMATION

RWY 05: TORA-3438 TODA-3438 ASDA-3438 LDA-3438

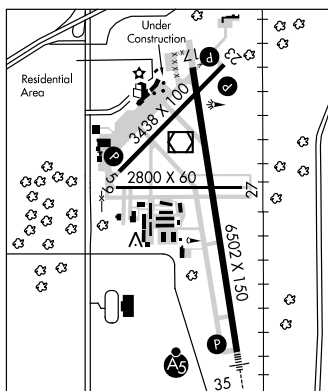
RWY 09: TORA-2800 TODA-2800 ASDA-2800 LDA-2800

RWY 17: TORA-6502 TODA-6502 ASDA-6502 LDA-6502

RWY 23: TORA-3438 TODA-3438 ASDA-3438 LDA-3438

RWY 27: TORA-2800 TODA-2800 ASDA-2800 LDA-2800

RWY 35: TORA-6502 TODA-6502 ASDA-6502 LDA-6502



AIRPORT REMARKS: Attended continuously. Rwy 05-23 avbl for air

carrier twy only and Rwy 09-27 not avbl for air carrier ops with more than 10 passenger seats. Migratory water fowl roosting area 5500' apch end Rwy 35. Birds on and in/ovf arpt. PPR for unscheduled air carrier ops with more than 30 passenger seats call arpt manager 269-388-3668. Rwy 09 and Rwy 05 apch ends are closely aligned. Verify correct rwy and compass heading prior to departure. When twr clsd ACTIVATE HIRL Rwy 17-35, MIRL Rwy 05-23 and Rwy 09-27; MALSR Rwy 35; PAPI Rwy 05, Rwy 23, Rwy 17, and Rwy 35; REIL Rwy 05, Rwy 23 and Rwy 17—CTAF. FAR PART 36 noise limits in effect 0400-1130Z†. For customs call 269-965-3349.

Twys F and G east of Rwy 17-35 restricted acft less than 12,500 lbs.

WEATHER DATA SOURCES: ASOS (269) 384-5729. LAWRs.

COMMUNICATIONS: CTAF 118.3 ATIS 127.25 UNICOM 122.95

RCO 122.1R 109.0T (LANSING RADIO)

(R) APP/DEP CON 121.2 (175°-353°) 119.2 (354°-174°) 123.8 (1100-0400Z†)

(R) CHICAGO CENTER APP/DEP CON 127.55 (0400-1100Z†)

TOWER 118.3 (1100-0400Z†) GND CON 121.9 CLNC DEL 121.75

AIRSPACE: CLASS D svc 1100-0400Z† other times CLASS G.

TRSA svc etc APP CON

RADIO AIDS TO NAVIGATION: NOTAM FILE AZO.

(L) VOR/DME 109.0 AZO Chan 27 N42°14.22' W85°33.19' at fld. 870/1W.

DME portion unusable byd 35 NM blo 2500'.

AUSTN NDB (LOM) 371 AZ N42°07.86' W85°31.79' 354° 6.3 NM to fld. Unmonitored when twr clsd.

ILS 110.9 I-AZO Rwy 35. LOM AUSTN NDB. LOC BC unusable byd 10° left and right of course. LOC BC unusable byd 10 NM. LOC and GS unmonitored when twr closed.

ASR (1100-0400Z†)

NEWMAN'S (4NØ) 7 W UTC-5(-4DT) N42°17.34' W85°45.00'

CHICAGO

840 NOTAM FILE LAN

RWY 18-36: 2697X125 (TURF) LIRL

RWY 18: Thld dspcd 191'. Trees.

RWY 36: Thld dspcd 385'. Tree.

AIRPORT REMARKS: Attended irregularly. Deer invof rwy. Rwy 18-36 and dspcd thlds marked with 3' yellow cones.

ACTIVATE LIRL Rwy 18-36-122.9.

COMMUNICATIONS: CTAF: 122.9

KALKASKA CITY (Y89) 1 SW UTC-5(-4DT) N44°43.51' W85°12.19'

GREEN BAY

1030 NOTAM FILE LAN

RWY 10-28: H3500X75 (ASPH) MIRL

RWY 10: PAPI(P2L)—GA 3.0° TCH 24'. Trees.

RWY 28: PAPI(P2L)—GA 4.0° TCH 32'. Trees.

AIRPORT REMARKS: Unattended. Deer and birds on and invof arpt. ACTIVATE MIRL Rwy 10-28 and PAPI Rwy 10 and Rwy 28—CTAF.

COMMUNICATIONS: CTAF 122.9

RADIO AIDS TO NAVIGATION: NOTAM FILE TVC.

TRAVERSE CITY (H) VORTACW 114.6 TVC Chan 93 N44°40.07' W85°33.00' 079° 15.2 NM to fld. 912/2W.

HIWAS

L-31B

APP CRS **049°**  
Rwy Idg **3438**  
TDZE **874**  
Apt Elev **874**

GPS RWY 5

KALAMAZOO/BATTLE CREEK INTL (AZO)

**NA**  
ASR  
When local altimeter setting not received, use Grand Rapids altimeter setting and increase all MDA 120 feet, increase S-5 and Circling Cat C visibility ¼ mile.

MISSED APPROACH: Climb to 2500 direct BIGUM WP and hold.

ATIS  
**127.25**

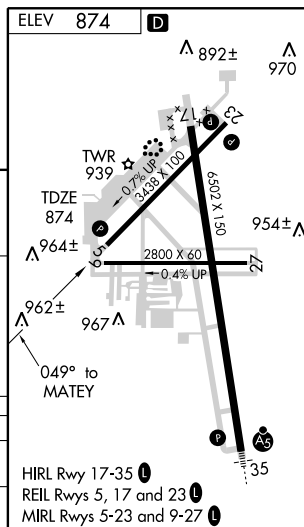
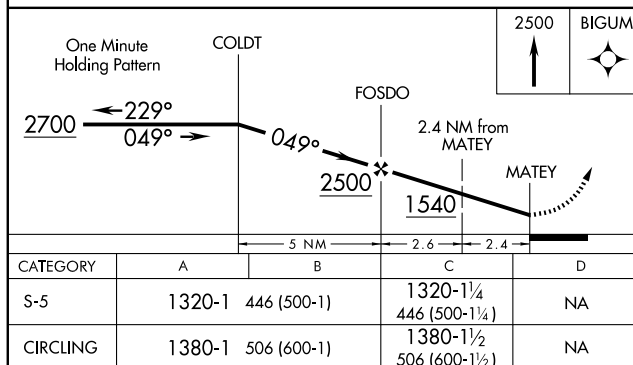
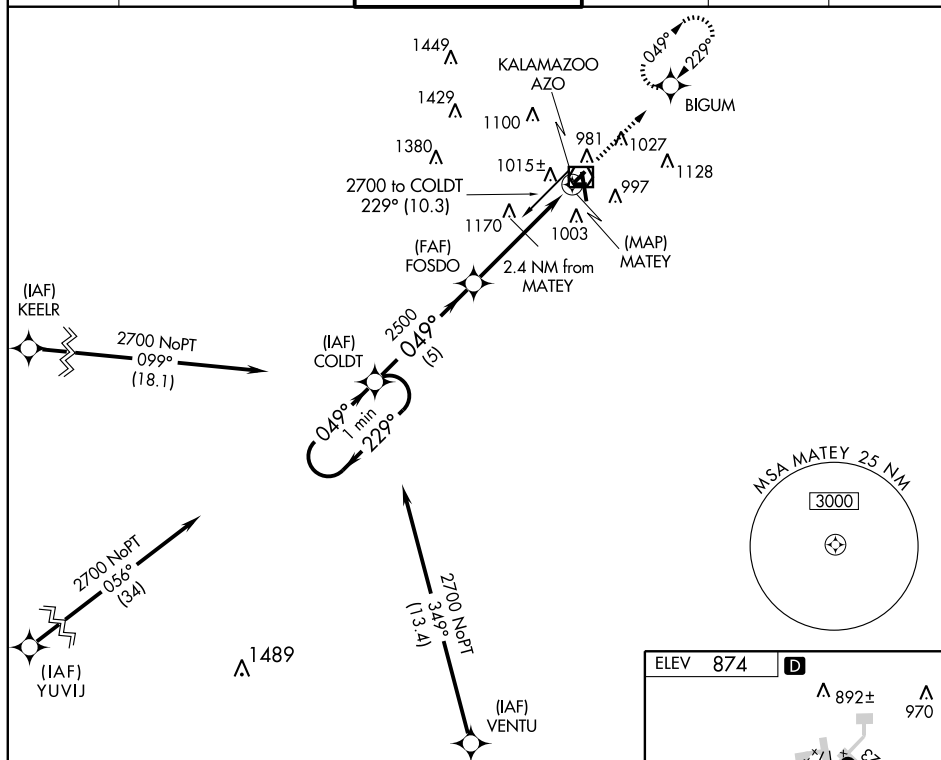
KALAMAZOO APP CON ★  
**121.2 340.9**

KALAMAZOO TOWER ★  
**118.3 (CTAF) 308.6**

GND CON  
**121.9**

CLNC DEL  
**121.75**

UNICOM  
**122.95**



APP CRS **217°**  
Rwy Idg **3438**  
TDZE **874**  
Apt Elev **874**

GPS RWY 23

KALAMAZOO/BATTLE CREEK INTL (AZO)

When local altimeter not received,  
use Grand Rapids altimeter setting.

MISSED APPROACH: Climb to 2200  
direct DAGGU WP and hold.

ATIS  
**127.25**

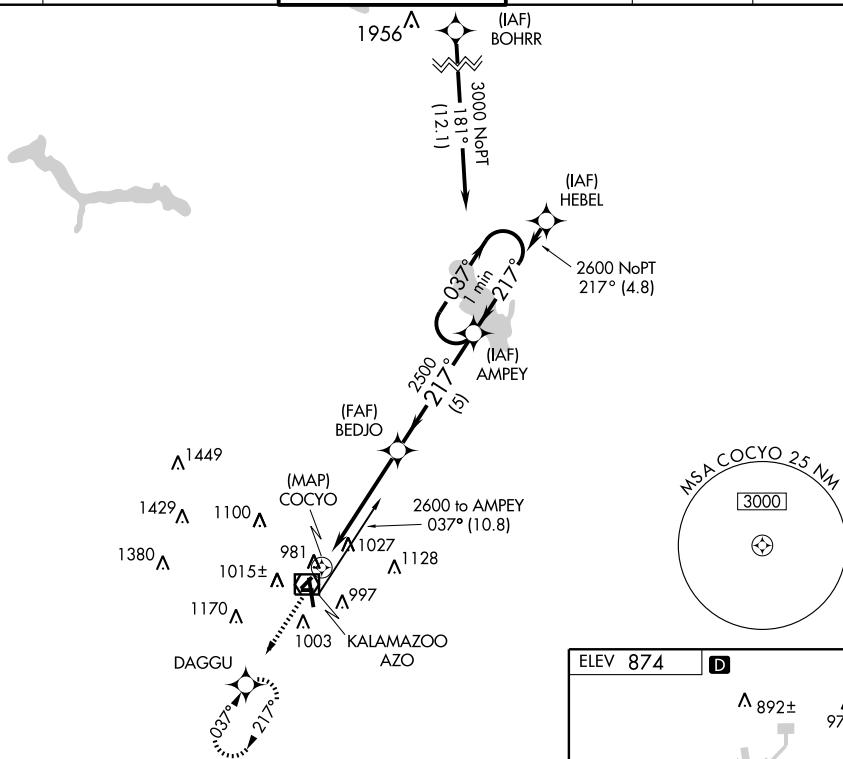
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**121.2 340.9**

KALAMAZOO TOWER ★  
**118.3 (CTAF) 308.6**

GND CON  
**121.9**

CLNC DEL  
**121.75**

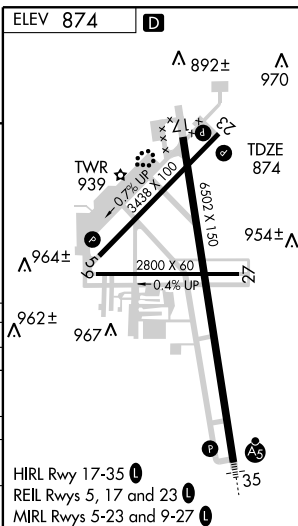
UNICOM  
**122.95**



2200 DAGGU

COCYO 2500 217° 037° 2600 217°

CATEGORY	A	B	C	D
S-23	1300-1	426 (500-1)	1300-1¼	426 (500-1¼)
CIRCLING	1380-1	506 (600-1)	1380-1½	1440-2
			506 (600-1½)	566 (600-2)
GRAND RAPIDS ALTIMETER SETTING MINIMUMS				
S-23	1400-1	526 (600-1)	1400-1½	1400-1¾
			526 (600-1½)	526 (600-1¾)
CIRCLING	1480-1	606 (700-1)	1480-1¾	1480-2
			606 (700-1¾)	606 (700-2)



## HOT SPOTS

An "airport surface hot spot" is a location on an aerodrome movement area with a history or potential risk of collision or runway incursion, and where heightened attention by pilots/drivers is necessary.

A "hot spot" is a runway safety related problem area on an airport that presents increased risk during surface operations. Typically it is a complex or confusing taxiway/taxiway or taxiway/runway intersection. The area of increased risk has either a history of or potential for runway incursions or surface incidents, due to a variety of causes, such as but not limited to: airport layout, traffic flow, airport marking, signage and lighting, situational awareness, and training. Hot spots are depicted on airport diagrams as open circles or polygons designated as "HS 1", "HS 2", etc. and tabulated in the list below with a brief description of each hot spot. Hot spots will remain charted on airport diagrams until such time the increased risk has been reduced or eliminated.

CITY/AIRPORT	HOT SPOT	DESCRIPTION*
DETROIT, MI		
DETROIT METROPOLITAN		
WAYNE COUNTY (DTW)	HS 1	Rwy 04R-22L and Rwy 09L-27R.
	HS 2	Rwy 03L-21R and Rwy 09L-27R.
	HS 3	Twy F and Rwy 03L-21R.
DETROIT, MI		
WILLOW RUN (YIP)	HS 1	Complex rwys/twy int.
	HS 2	Twy E1 to Rwy 27 or Rwy 23L wrong rwy departure risk.
JACKSON, MI		
JACKSON COUNTY-		
REYNOLDS FIELD (JXN)	HS 1	Confusing signage.
	HS 2	No signage.
KALAMAZOO, MI		
KALAMAZOO/BATTLE		
CREEK INTL (AZO)	HS 1	Complex rwy/twy int.
	HS 2	Wrong rwy departure risk from Twy C.
	HS 3	Wrong rwy departure risk from Twy F.

\*See appropriate A/FD, Alaska or Pacific Supplement HOT SPOT table for additional information.

LOC I-AZO <b>110.9</b>	APP CRS <b>354°</b>	Rwy Idg TDZE Apt Elev	<b>6502</b> <b>868</b> <b>874</b>
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# ILS or LOC RWY 35

## KALAMAZOO/BATTLE CREEK INTL (AZO)

**V**  
**ASR** \* RVR 1800 authorized with the use of FD or AP or HUD to DA.



MISSED APPROACH: Climb to 2600 via AZO VOR/DME R-353 to UPJON INT/AZO 5.6 DME and hold.

ATIS  
**127.25**

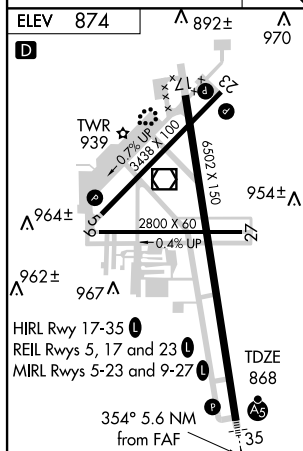
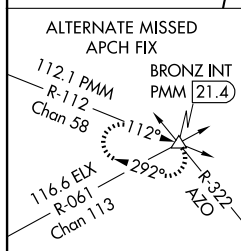
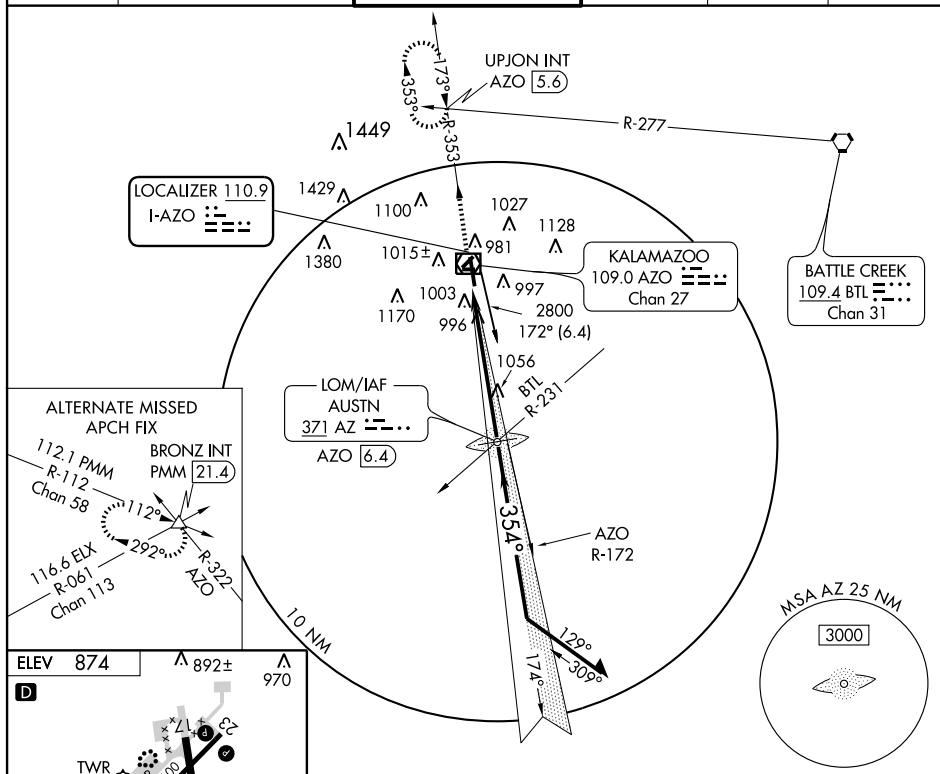
KALAMAZOO APP CON ★  
**121.2 340.9**

KALAMAZOO TOWER ★  
**118.3** (CTAF) **308.6**

GND CON  
**121.9**

CLNC DEL  
**121.75**

UNICOM  
**122.95**



FAF to MAP 5.6 NM					
Knots	60	90	120	150	180
Min:Sec	5:36	3:44	2:48	2:14	1:52

KALAMAZOO, MICHIGAN  
Amdt 22B 03JUN10

42°14'N - 85°33'W

# ILS or LOC RWY 35

2600

↑

AZO

R-353

UPJON

INT

AUSTN

LOM/INT

2727

174°

2800

354°

2800

GS 2.98°

TCH 53


Remain within 10 NM

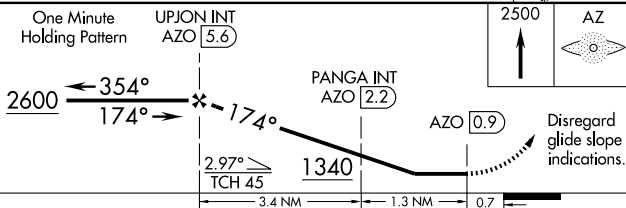
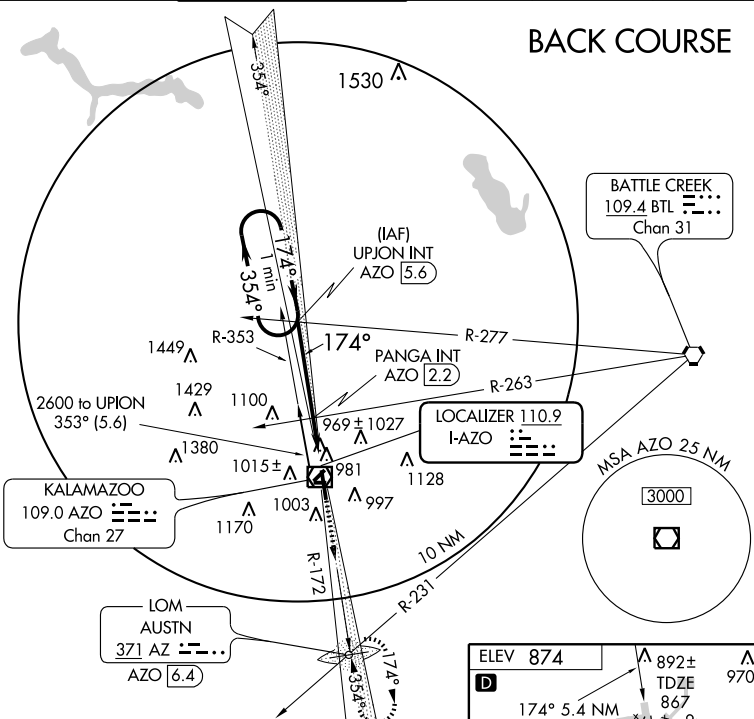
5.6 NM

CATEGORY	A	B	C	D
S-ILS 35	*1068/24 200 (200-½)			
S-LOC 35	1320/24	452 (500-½)	1320/40 452 (500-¾)	1320/50 452 (500-1)
CIRCLING	1380-1	506 (600-1)	1380-1½ 506 (600-1½)	1440-2 566 (600-2)

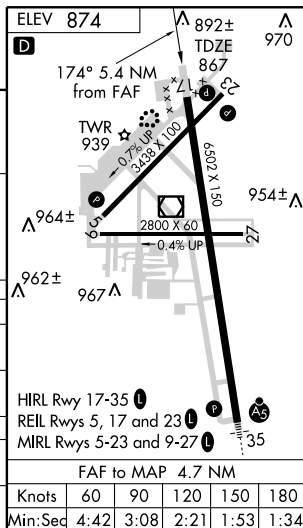
LOC I-AZO <b><u>110.9</u></b>	APP CRS <b>174°</b>	Rwy Idg <b>6502</b> TDZE <b>867</b> Apt Elev <b>874</b>
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LOC BC RWY 17  
KALAMAZOO/BATTLE CREEK INTL (AZO)

 <b>ASR</b>	Visibility reduction by helicopters NA.		MISSED APPROACH: Climb to 2500 direct AUSTN LOM/Int/AZO 6.4 DME and hold.			
	ATIS <b>127.25</b>	KALAMAZOO APP CON ★ <b>121.2 340.9</b>	KALAMAZOO TOWER ★ <b>118.3 (CTAF) 0 308.6</b>	GND CON <b>121.9</b>	CLNC DEL <b>121.75</b>	UNICOM <b>122.95</b>



CATEGORY	A	B	C	D
S-17	1340-1	473 (500-1)	1340-1½ 473 (500-1½)	1340-1½ 473 (500-1½)
CIRCLING	1380-1	506 (600-1)	1380-1½ 506 (600-1½)	1440-2 566 (600-2)
PANGA FIX MINIMUMS				
S-17	1220-1	353 (400-1)		1220-1½ 353 (400-1½)
CIRCLING	1380-1	506 (600-1)	1380-1½ 506 (600-1½)	1440-2 566 (600-2)





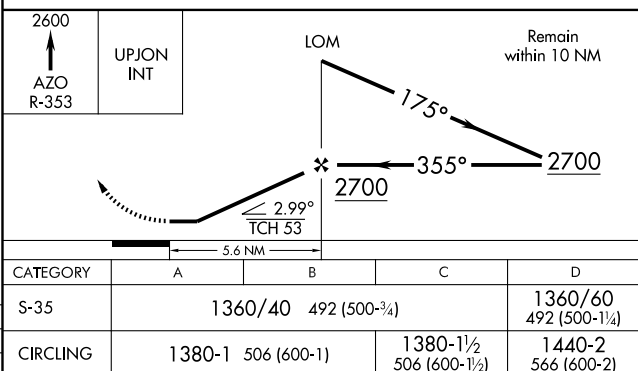
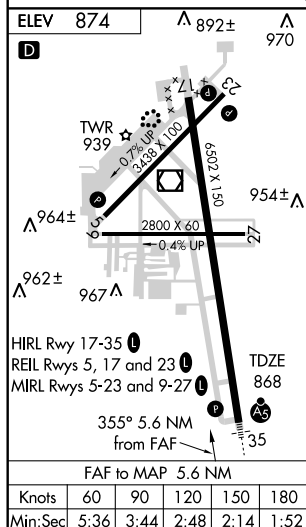
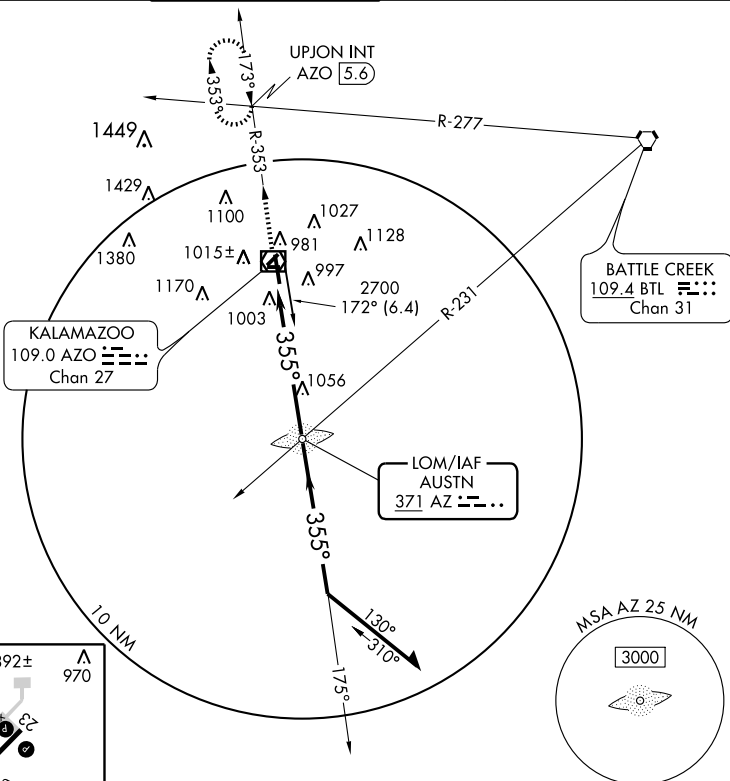


LOM AZ <b>371</b>	APP CRS <b>355°</b>	Rwy Idg TDZE Apt Elev	<b>6502</b> <b>868</b> <b>874</b>
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**NDB RWY 35**

KALAMAZOO/BATTLE CREEK INTL (AZO)

 ASR		MALS R 	MISSED APPROACH: Climb to 2600 via AZO VOR/DME R-353 to UPJON Int/AZO 5.6 DME and hold.		
ATIS <b>127.25</b>	KALAMAZOO APP CON★ <b>121.2 340.9</b>	KALAMAZOO TOWER★ <b>118.3 (CTAF) 308.6</b>	GND CON <b>121.9</b>	CLNC DEL <b>121.75</b>	UNICOM <b>122.95</b>



APP CRS	Rwy Idg	<b>6502</b>
<b>174°</b>	TDZE	<b>867</b>
	Apt Elev	<b>874</b>

# RNAV (GPS) RWY 17

## KALAMAZOO/BATTLE CREEK INTL (AZO)

**ASR** DME/DME RNP-0.3 NA.  
Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to  
2800 direct COVAV and hold.

ATIS  
**127.25**

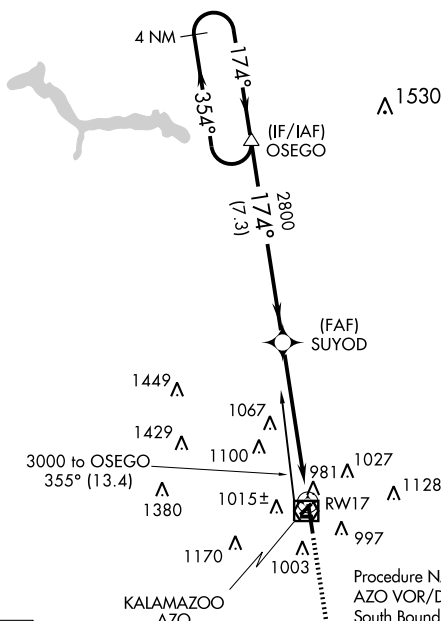
KALAMAZOO APP CON ★  
**121.2 340.9**

KALAMAZOO TOWER ★  
**118.3 (CTAF) 308.6**

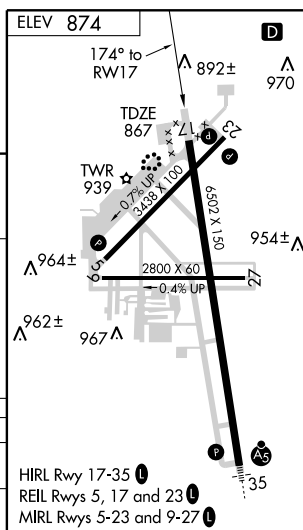
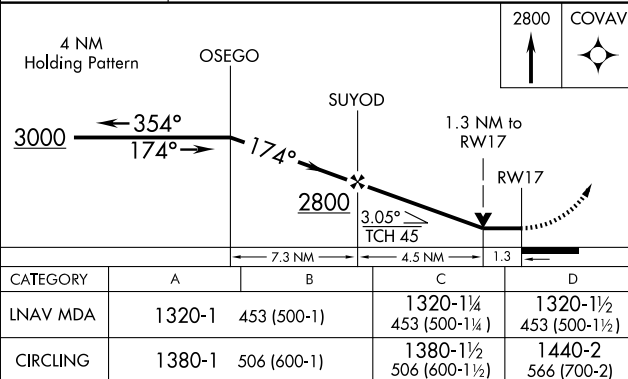
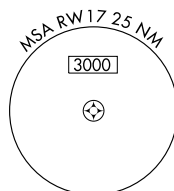
GND CON  
**121.9**

CLNC DEL  
**121.75**

UNICOM  
**122.95**



MISSED APCH FIX  
COVAV



WAAS CH <b>61102</b> <b>W35A</b>	APP CRS <b>354°</b>	Rwy Idg <b>6502</b> TDZE <b>868</b> Apt Elev <b>874</b>
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# RNAV (GPS) RWY 35

## KALAMAZOO/BATTLE CREEK INTL (AZO)

**ASR** For inoperative MALSR, increase LPV all Cats visibility to RVR 5000 and LNAV Cat D visibility to RVR 6000. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 49°C (121°F). DME/DME RNP-0.3 NA.

MALSR

**MISSED APPROACH:** Climb to 3000 direct OSEGO and hold.

ATIS  
**127.25**

KALAMAZOO APP CON ★  
121.2 340.9

KALAMAZOO TOWER ★  
118.3 (CTAF) **L** 308.6

GND CON  
**121.9**

CLNC DE  
**121.75**

UNICOM  
122.95

MISSED APCH FIX

Diagram illustrating the structure of the OSEGO molecule, showing a 4 nm length, a 174° angle, and a 354° angle.

Procedure NA for arrivals  
on AZO VOR/DME airway  
radials 192 CW 232.

(FAF)  
EYOLU

(COV.

2800 NoPT  
349° (6)

(IAF)  
YURUD

ELEV 874	<b>D</b> $\Delta$ 892±	$\Delta$ 970
----------	------------------------	--------------

3000  
↑  
OSEGO  
△

\* LNAV only

EYOLU

COVAV

5 NM  
Holding Pattern

\*1.1 NM  
to RW35

RW35

1.1

4.7 NM

6 NM

354°

174°

2800

GS 2.98°  
TCH 53

CATEGORY	A	B	C	D
LPV DA		1134/24	266 (300-½)	
LNAV/ VNAV DA		1283/50	415 (500-1)	
LNAV MDA		1260-24	392 (400-½)	1260/50 392 (400-1)
CIRCLING		1380-1½	506 (600-1½)	1440-2 566 (600-2)

KALAMAZOO, MICHIGAN  
Orig 10210

42°14'N - 85°33'W

KALAMAZOO/BATTLE CREEK INTL (AZO)  
RNAV (GPS) RWY 35

EC-1. 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010

VOR/DME AZO <b>109.0</b> Chan <b>27</b>	APP CRS <b>050°</b>	Rwy Idg <b>3438</b> TDZE <b>874</b> Apt Elev <b>874</b>
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**VOR RWY 5**

KALAMAZOO/BATTLE CREEK INTL (AZO)



When control tower closed, procedure not authorized.

 MISSED APPROACH: Climb to 2500 via AZO  
 R-040 to GULLE Int/AZO 5 DME and hold.

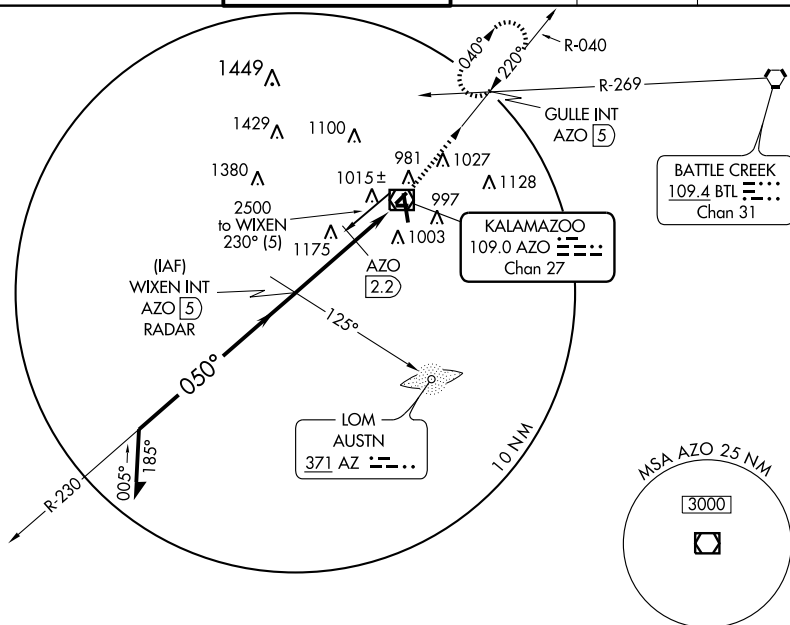
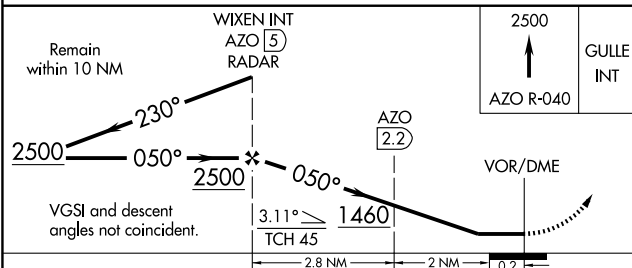
 ATIS  
**127.25**

 KALAMAZOO APP CON ★  
**121.2 340.9**

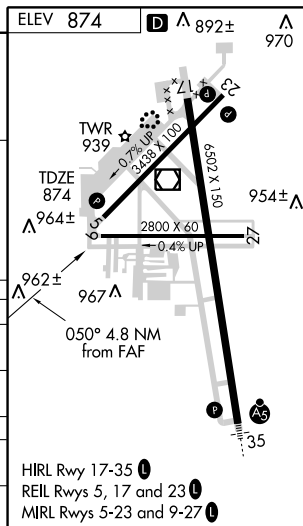
 KALAMAZOO TOWER ★  
**118.3 (CTAF) 308.6**

 GND CON  
**121.9**

 CLNC DEL  
**121.75**

 UNICOM  
**122.95**
**DME, ADF or AZO ASR REQUIRED**

CATEGORY	A	B	C	D
S-5	1460-1	586 (600-1)	1460-1½ 586 (600-1½)	NA
CIRCLING	1460-1	586 (600-1)	1460-1½ 586 (600-1½)	NA
DME MINIMUMS				
S-5	1340-1	466 (500-1)	1340-1¼ 466 (500-1¼)	NA
CIRCLING	1340-1	466 (500-1)	1340-1½ 466 (500-1½)	NA


 HIRL Rwy 17-35  
 REIL Rwy 5, 17 and 23  
 MIRL Rwy 5-23 and 9-27

VOR/DME AZO <b>109.0</b> Chan <b>27</b>	APP CRS <b>180°</b>	Rwy Idg <b>6502</b> TDZE <b>867</b> Apt Elev <b>874</b>
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VOR RWY 17  
KALAMAZOO/BATTLE CREEK INTL (AZO)

ASR Visibility reduction by helicopters NA.

**MISSED APPROACH:** Climb to 2500 via AZO R-172 to AUSTN LOM/Int/AZO 6.4 DME and hold.

ATIS  
**127.25**

KALAMAZOO APP CON ★  
121.2 340.9

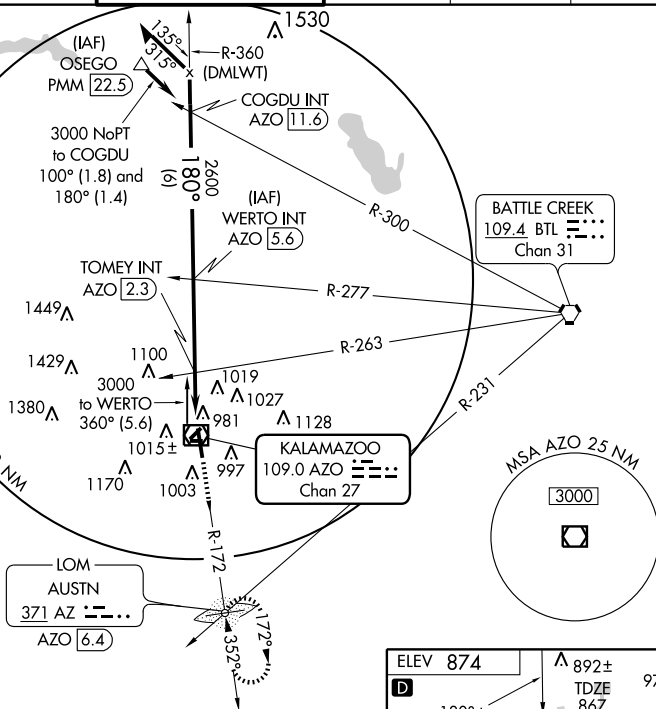
KALAMAZOO TOWER★  
118.3 (CTAF) **L** 308.6

GND CON  
**121.9**

CLNC DEL  
**121.75**

UNICOM  
122.95

Procedure NA for arrival at  
OSEGO Int via V170 W Bnd.



Remain  
within 10 NM

WERTO INT  
AZO 5.6

TOMEY INT  
AZO(2.3)

2500	AZ
------	----

3000  $\searrow$  50  
180°  $\rightarrow$  2600

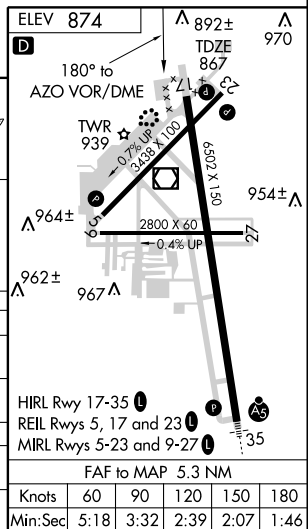
2.99°	TCH 45	1480
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AZO	AZO	VOR/DME
1.6	0.3	

CATEGORY			3.3 NM		0.7	1.3	0.3
	A	B	C		D		
S-17	1480-1	613 (700-1)	1480-1 <sup>3</sup> / <sub>4</sub> 613 (700-1 <sup>3</sup> / <sub>4</sub> )		1480-2 613 (700-2)		
CIRCLING	1480-1	606 (700-1)	1480-1 <sup>3</sup> / <sub>4</sub> 606 (700-1 <sup>3</sup> / <sub>4</sub> )		1480-2 606 (700-2)		

TOMEY FIX MINIMUMS

S-17	1320-1 453 (500-1)	1320-1 $\frac{1}{4}$ 453 (500-1 $\frac{1}{4}$ )	1320-1 $\frac{1}{2}$ 453 (500-1 $\frac{1}{2}$ )
CIRCLING	1380-1 506 (600-1)	1380-1 $\frac{1}{2}$ 506 (600-1 $\frac{1}{2}$ )	1440-2 566 (600-2)



KALAMAZOO, MICHIGAN  
Amdt 18A 10210

42°14'N - 85°33'W

KALAMAZOO/BATTLE CREEK INTL (AZO)  
VOR RWY 17

EC-1, 23 SEP 2010 to 21 OCT 2010

VOR/DME AZO  
**109.0**  
 Chan **27**

APP CRS  
**220°**

Rwy Idg **3438**  
 TDZE **873**  
 Apt Elev **874**

# VOR RWY 23

## KALAMAZOO/BATTLE CREEK INTL (AZO)

**ASR** When Control Tower closed, except for operators with approved weather reporting service, use South Bend altimeter setting.

MISSED APPROACH: Climbing left turn to 2500 via AZO R-172 to AUSTN LOM/Int/AZO 6.4 DME and hold.

ATIS  
**127.25**

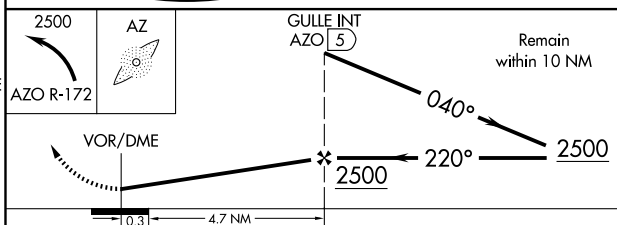
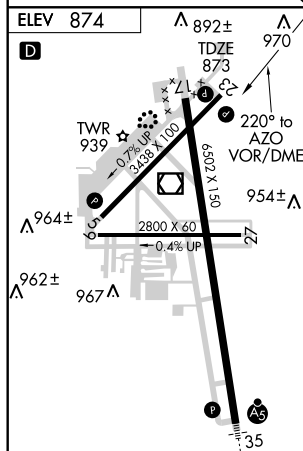
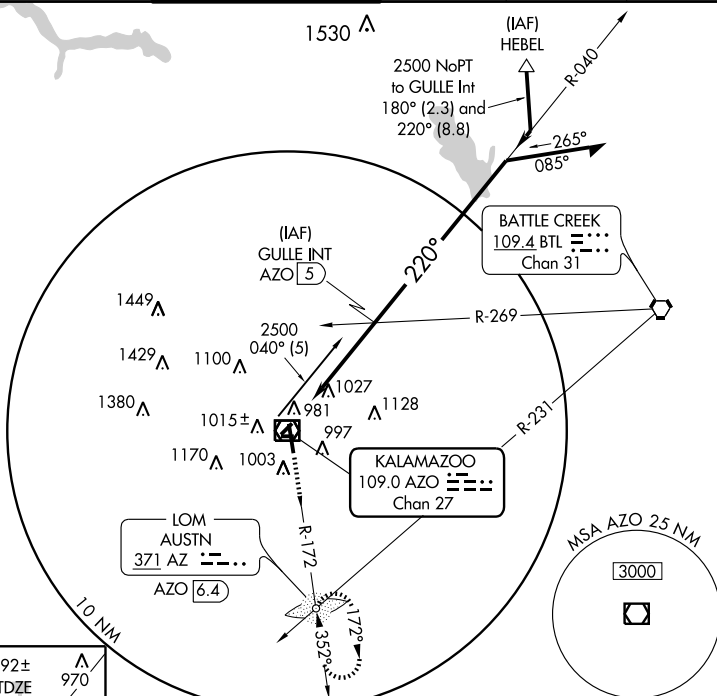
KALAMAZOO APP CON ★  
**121.2 340.9**

KALAMAZOO TOWER ★  
**118.3 (CTAF) 308.6**

GND CON  
**121.9**

CLNC DEL  
**121.75**

UNICOM  
**122.95**



CATEGORY	A	B	C	D
S-23	1300-1	427 (500-1)	1300-1½ 427 (500-1½)	1300-1½ 427 (500-1½)
CIRCLING	1320-1 446 (500-1)	1340-1 466 (500-1)	1340-1½ 466 (500-1½)	1440-2 566 (600-2)
SOUTH BEND ALTIMETER SETTING MINIMUMS				
S-23	1520-1	647 (700-1)	1520-1¾ 647 (700-1¾)	1520-2 647 (700-2)
CIRCLING	1540-1	666 (700-1)	1560-2 686 (700-2)	1640-2½ 766 (800-2½)

VOR/DME AZO	APP CRS	Rwy Idg	<b>6502</b>
<b>109.0</b>		TDZE	<b>868</b>
Chan <b>27</b>	<b>347°</b>	Apt Elev	<b>874</b>

VOR RWY 35  
KALAMAZOO/BATTLE CREEK INTL (AZO)

**T** For inoperative MALSR, increase S-35 Cat A and B visibility to RVR 5000.

MALSR

MISSED APPROACH: Climb to 2600 via AZC  
R-353 to UPJON Int/AZO 5.6 DME and hold.

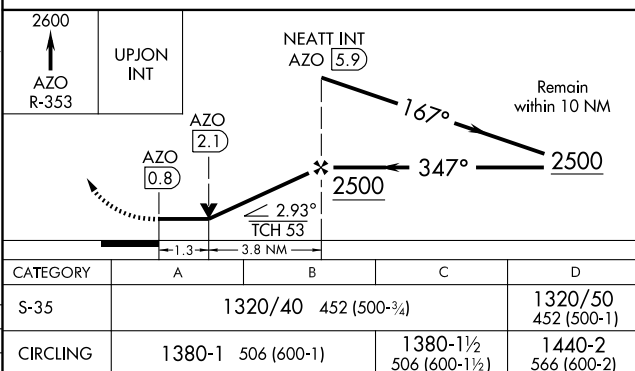
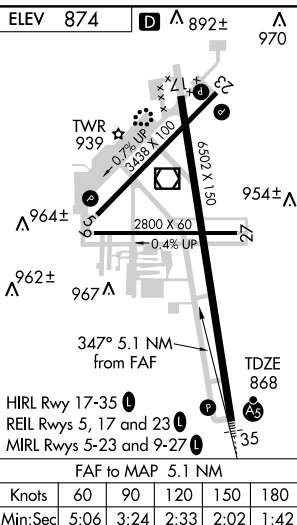
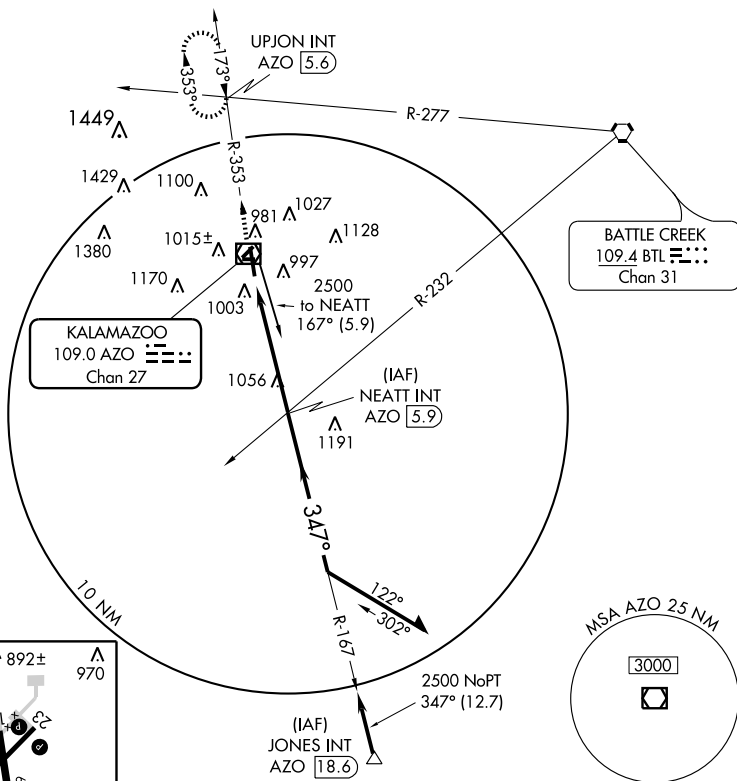
ATIS  
**127.25**

KALAMAZOO APP CON ★  
121.2 340.9

KALAMAZOO TOWER★  
118.3 (CTAF) **L** 308.6

GND CON  
**121.9**

CLNC DEL  
**121,75**

UNICOM  
122.95KALAMAZOO, MICHIGAN  
Amdt 17A 03JUN10

42°14'N - 85°33'W

KALAMAZOO/BATTLE CREEK INTL (AZO)
WED JAN 25

VOR RWY 35

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1. 23 SEP 2010 to 21 OCT 2010

**LAKEVIEW ARPT—GRIFFITH FLD** (13C) 1 NE UTC-5(-4DT) N43°27.13' W85°15.89'

CHICAGO

969 B S4 FUEL 100LL NOTAM FILE LAN

L-28J

RWY 09-27: H3500X75 (ASPH) S-12 MIRL

IAP

RWY 09: REIL. PAPI(P2L)-GA 3.0° TCH 40'. Trees.

RWY 27: REIL. PAPI(P2L)-GA 3.0° TCH 50'. Trees.

**AIRPORT REMARKS:** Attended 1300Z±-dusk. For service after hrs call assistant arpt manager on 616-527-0915. ACTIVATE MIRL Rwy 09-27; PAPI and REIL Rwy 09 and 27—CTAF. Agricultural and Helicopter ops on grass area N of Rwy 09-27.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

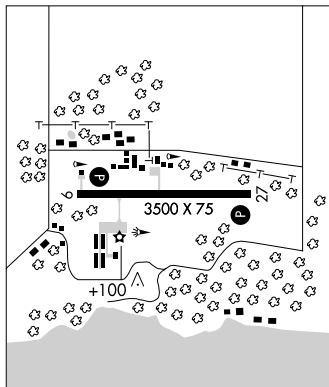
Ⓡ GRAND RAPIDS APP/DEP CON 124.6 (1030-0500Z±)

Ⓡ CHICAGO CENTER APP/DEP CON 128.5 (0500-1030Z±)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE LAN.

WHITE CLOUD (L) VOR/DME 117.6 HIC Chan 123 N43°34.49'

W85°42.97' 111° 21 NM to fld. 920/1W.

**LAMBERTVILLE****TOLEDO SUBURBAN** (DUH) 2 SW UTC-5(-4DT) N41°44.15' W83°39.35'

DETROIT

669 B S4 FUEL 100LL, JET A NOTAM FILE DUH

L-28J

RWY 09-27: H4851X50 (ASPH) MIRL

IAP

RWY 09: Thld displcd 1298'. Trees.

RWY 27: Thld displcd 1017'. Road.

**AIRPORT REMARKS:** Attended May-Sept 1300-0100Z±, Oct-Apr 1300-2300Z±. Deer on and invof arpt. Parallel twy CLOSED indef. 4' fence 110' N side of rwy. Crops 50' S side of rwy in primary surface. ACTIVATE NSTD MIRL Rwy 09-27—CTAF.

**WEATHER DATA SOURCES:** AWOS-3 119.175 (734) 856-1563.**COMMUNICATIONS:** CTAF/UNICOM 122.7

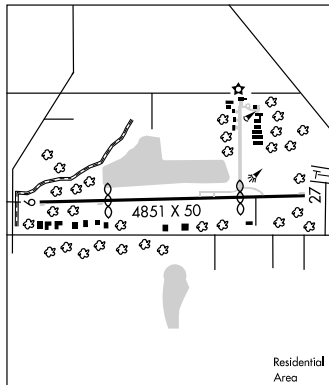
WATERVILLE RCO 122.1R 113.1T (CLEVELAND RADIO)

Ⓡ TOLEDO APP/DEP CON 134.35

**RADIO AIDS TO NAVIGATION:** NOTAM FILE CLE.

WATERVILLE (L) VOR/DME 113.1 VWV Chan 78 N41°27.09'

W83°38.32' 359° 17.1 NM to fld. 660/2W.

**LANSING** N42°43.05' W84°41.86' NOTAM FILE LAN.

DETROIT

(L) VORTACW 110.8 LAN Chan 45 340° 3.8 NM to Abrams Muni. 887/5W.

H-5E, 10G, L-28J

VOR unusable 102°-158° blo 5000'.

RCO 122.2 (LANSING RADIO)



APP CRS **094°**  
 Rwy Idg **3500**  
 TDZE **969**  
 Apt Elev **969**

GPS RWY 9

LAKEVIEW AIRPORT-GRIFFITH FIELD (13C)



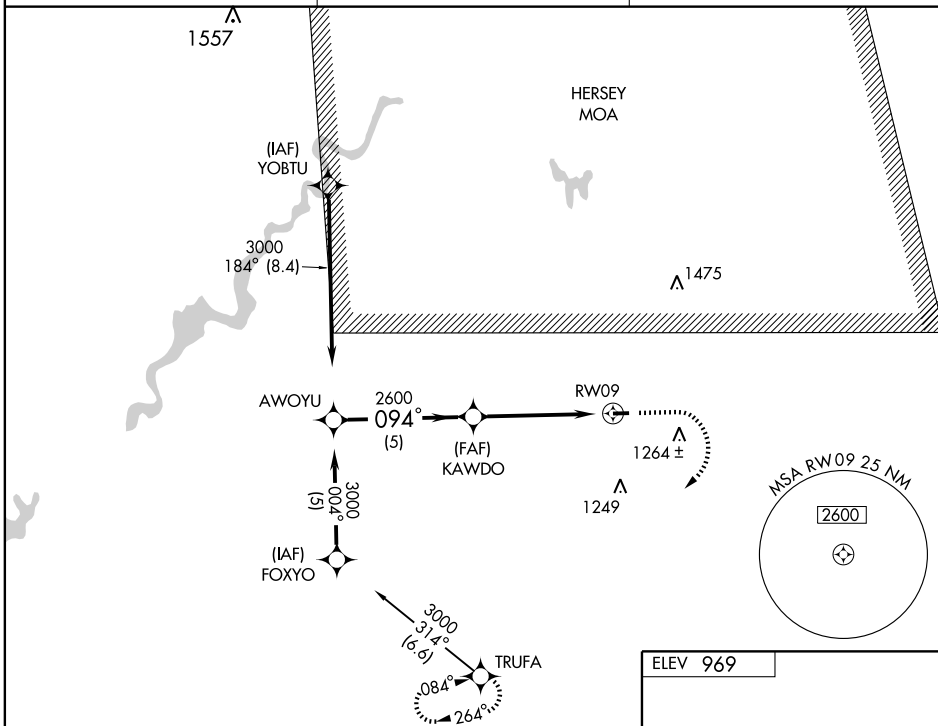
Use Roben-Hood altimeter setting.

MISSED APPROACH: Climb to 1800, then climbing right turn to 3000 direct TRUFA WP and hold.

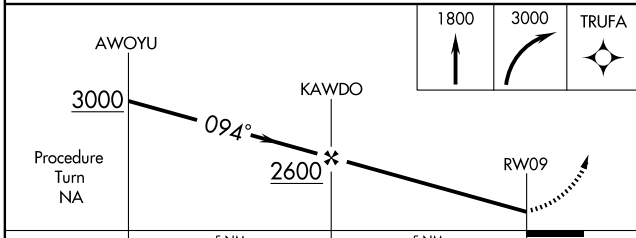
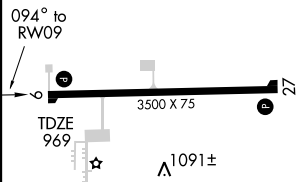
ROBEN-HOOD AWOS-3  
**121.125**

GRAND RAPIDS APP CON ★  
**124.6 257.6**

UNICOM  
**122.8 (CTAF) 0**



ELEV 969



CATEGORY	A	B	C	D
S-9	1400-1	431 (500-1)	NA	
CIRCLING	1440-1	1580-1	NA	
	471 (500-1)	611 (700-1)		

MIRL Rwy 9-27 0  
 REIL Rwys 9 and 27 0

APP CRS  
**274°**

Rwy Idg **3500**  
TDZE **969**  
Apt Elev **969**

**GPS RWY 27**

LAKEVIEW AIRPORT-GRIFFITH FIELD (13C)



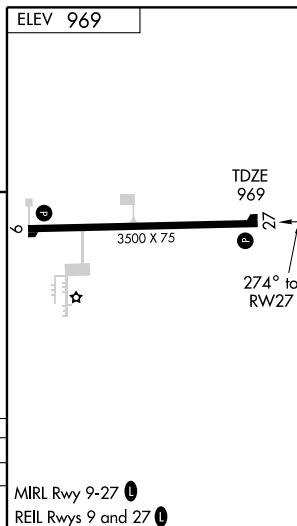
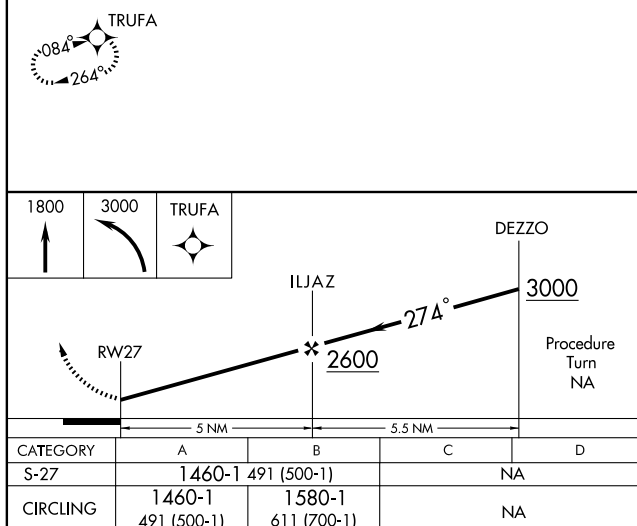
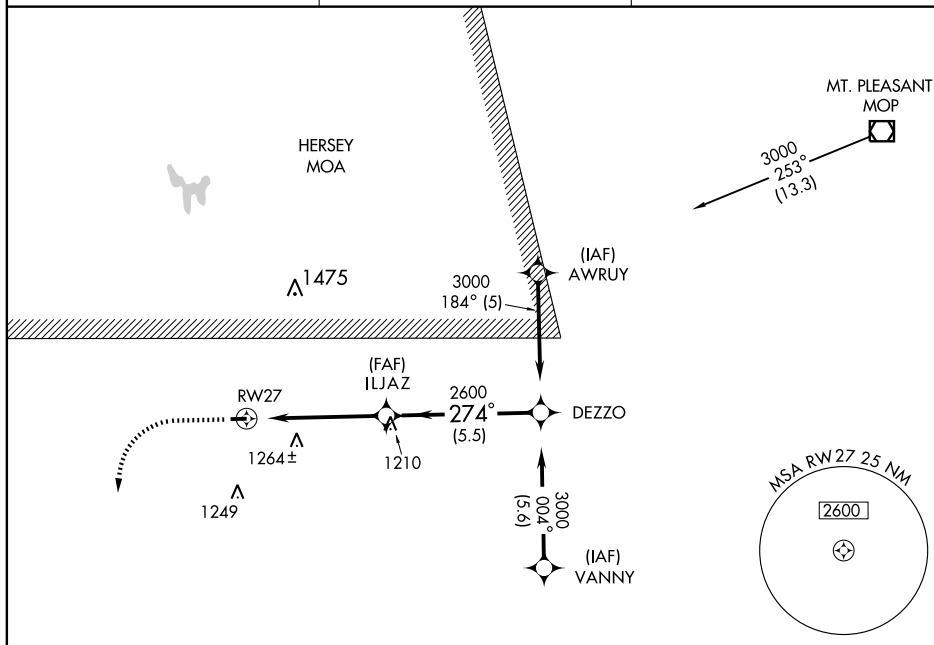
Use Roben-Hood altimeter setting.

MISSED APPROACH: Climb to 1800, then climbing left turn to 3000 direct TRUFA WP and hold.

ROBEN-HOOD AWOS-3  
**121.125**

GRAND RAPIDS APP CON ★  
**124.6 257.6**

UNICOM  
**122.8 (CTAF) 0**



VOR/DME HIC  
**117.6**  
Chan **123**

APP CRS  
112°

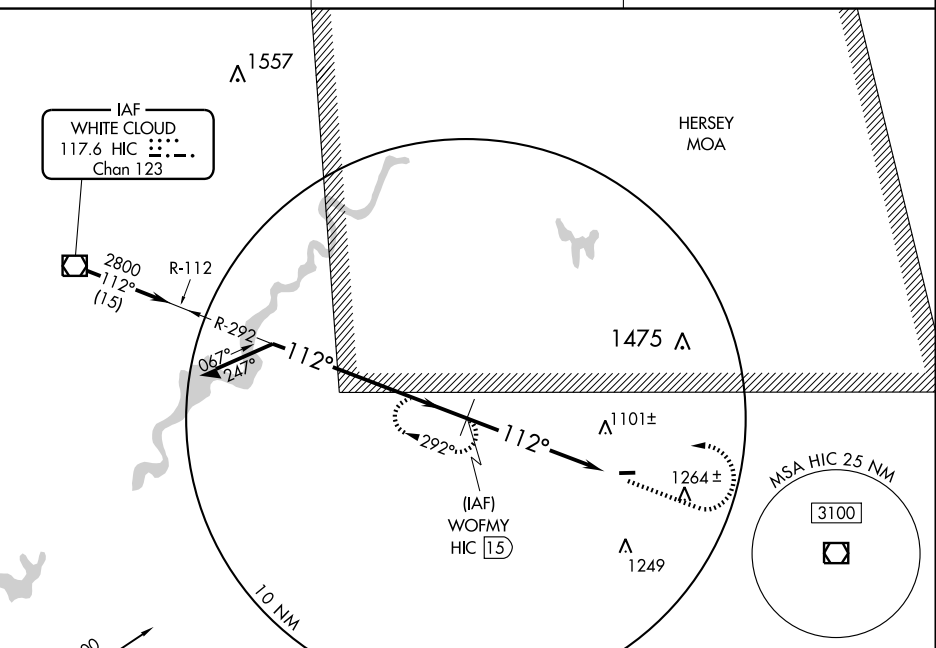
Rwy Idg	<b>3500</b>
TDZE	<b>969</b>
Apt Elev	<b>969</b>

VOR/DME RWY 9  
LAKEVIEW AIRPORT-GRIFFITH FIELD (13C)

Use Roben-Hood altimeter setting. MISSED APPROACH: Climb to 1800, then climbing left turn to 2800 via heading 260° and HIC VOR/DME R-112 to WOFMY and hold.

ROBEN-HOOD AWOS-3  
121.125

GRAND RAPIDS APP CON ★  
124.6 257.6

UNICOM  
122.8 (CTAF) **L**


MUSKEGON  
115.2 MKG   
Chan 99

Diagram illustrating the flight path and instrument panel. The flight path starts at a 2800 ft altitude, turns 112° left, then 292° right to a WOFMY HIC 15 waypoint. From there, it turns 112° right to a HIC 20.3 waypoint, and finally turns right (indicated by a dashed arrow). The instrument panel shows a heading of 260° and a WOFMY HIC 15 waypoint.

[illegible]

CATEGORY	A	B	C	D
S-9	1600-1 631 (700-1)	1600-1¼ 631 (700-1¼)	NA	
CIRCLING	1600-1 631 (700-1)	1600-1¼ 631 (700-1¼)	NA	

**LAKEVIEW ARPT—GRIFFITH FLD** (13C) 1 NE UTC-5(-4DT) N43°27.13' W85°15.89'

CHICAGO

969 B S4 FUEL 100LL NOTAM FILE LAN

L-28J

RWY 09-27: H3500X75 (ASPH) S-12 MIRL

IAP

RWY 09: REIL. PAPI(P2L)-GA 3.0° TCH 40'. Trees.

RWY 27: REIL. PAPI(P2L)-GA 3.0° TCH 50'. Trees.

**AIRPORT REMARKS:** Attended 1300Z±-dusk. For service after hrs call assistant arpt manager on 616-527-0915. ACTIVATE MIRL Rwy 09-27; PAPI and REIL Rwy 09 and 27—CTAF. Agricultural and Helicopter ops on grass area N of Rwy 09-27.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

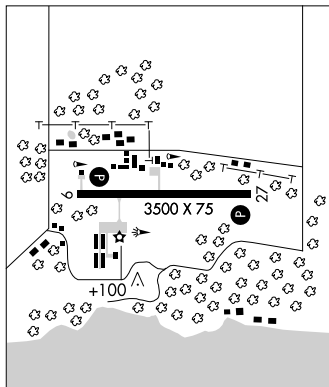
Ⓡ GRAND RAPIDS APP/DEP CON 124.6 (1030-0500Z±)

Ⓡ CHICAGO CENTER APP/DEP CON 128.5 (0500-1030Z±)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE LAN.

WHITE CLOUD (L) VOR/DME 117.6 HIC Chan 123 N43°34.49'

W85°42.97' 111° 21 NM to fld. 920/1W.

**LAMBERTVILLE****TOLEDO SUBURBAN** (DUH) 2 SW UTC-5(-4DT) N41°44.15' W83°39.35'

DETROIT

669 B S4 FUEL 100LL, JET A NOTAM FILE DUH

L-28J

RWY 09-27: H4851X50 (ASPH) MIRL

IAP

RWY 09: Thld dspcd 1298'. Trees.

RWY 27: Thld dspcd 1017'. Road.

**AIRPORT REMARKS:** Attended May-Sept 1300-0100Z±, Oct-Apr 1300-2300Z±. Deer on and invof arpt. Parallel twy CLOSED indef. 4' fence 110' N side of rwy. Crops 50' S side of rwy in primary surface. ACTIVATE NSTD MIRL Rwy 09-27—CTAF.

**WEATHER DATA SOURCES:** AWOS-3 119.175 (734) 856-1563.**COMMUNICATIONS:** CTAF/UNICOM 122.7

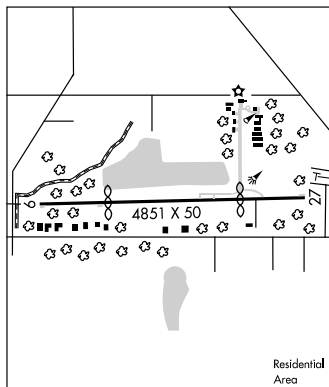
WATERVILLE RCO 122.1R 113.1T (CLEVELAND RADIO)

Ⓡ TOLEDO APP/DEP CON 134.35

**RADIO AIDS TO NAVIGATION:** NOTAM FILE CLE.

WATERVILLE (L) VOR/DME 113.1 VWV Chan 78 N41°27.09'

W83°38.32' 359° 17.1 NM to fld. 660/2W.

**LANSING** N42°43.05' W84°41.86' NOTAM FILE LAN.

DETROIT

(L) VORTACW 110.8 LAN Chan 45 340° 3.8 NM to Abrams Muni. 887/5W.

H-5E, 10G, L-28J

VOR unusable 102°-158° blo 5000'.

RCO 122.2 (LANSING RADIO)

VOR/DME VWV <b>113.1</b> Chan <b>78</b>	APP CRS <b>360°</b>	Rwy Idg <b>N/A</b> TDZE <b>N/A</b> Apt Elev <b>669</b>
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VOR or GPS-A  
LAMBERTVILLE/ TOLEDO SUBURBAN (DUH)

**TA** NA Use Toledo Express altimeter setting.

**MISSED APPROACH:** Climbing left turn to 2500 via VWV R-360 to VWV VOR/DME and hold.

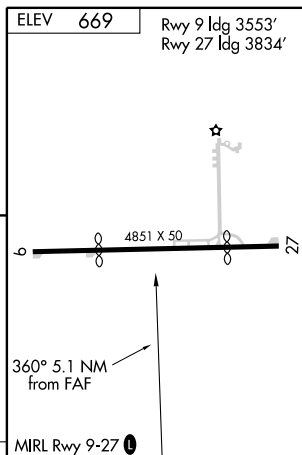
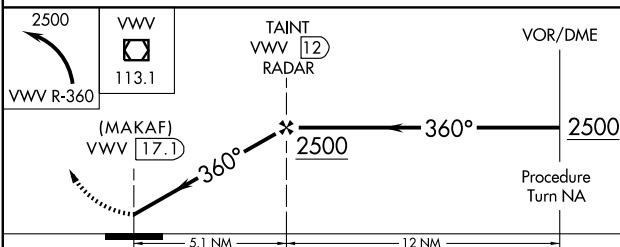
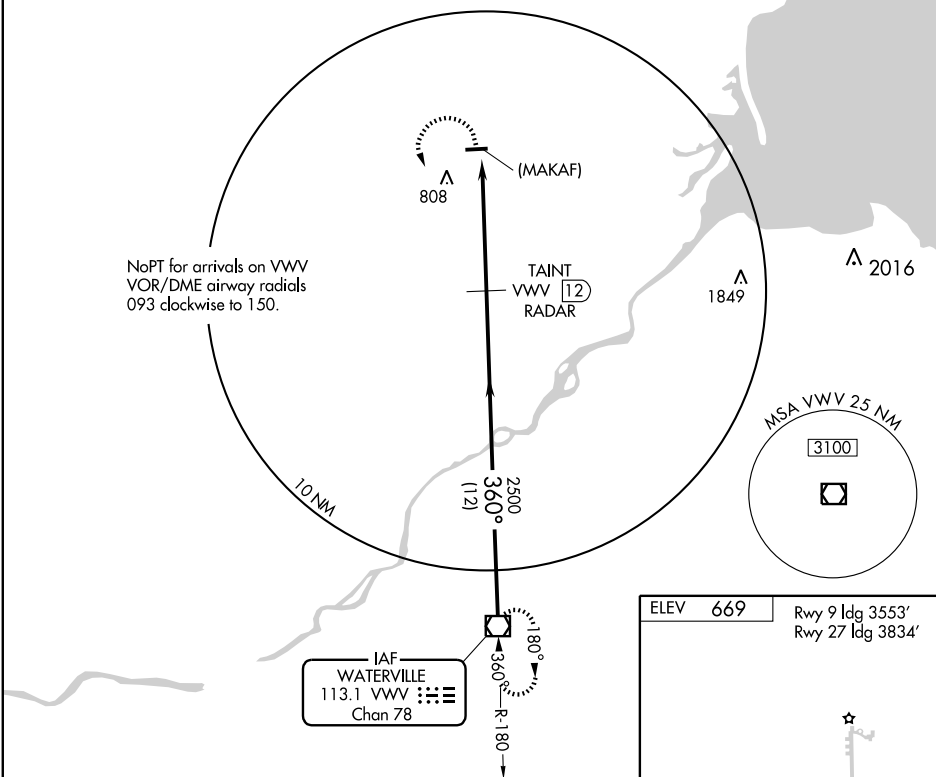
AWOS-3  
119.175

TOLEDO APP CON  
**134.35 317.55**

GCO  
121.725

UNICOM  
122.7 (CTAF) **L**

## DME or RADAR REQUIRED



CATEGORY	A	B	C	D	FAF to MAP 5.1 NM					
CIRCLING	1160-1 496 (500-1)		1160-1½ 496 (500-½)	NA	Knots	60	90	120	150	180
					Min:Sec	5:06	3:24	2:33	2:02	1:42

LAMBERTVILLE, MICHIGAN

Amdt 7 07354

LAMBERTVILLE/ TOLEDO SUBURBAN (DUH)

41°44'N - 83°39'W

VOR or GPS-A

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1. 23 SEP 2010 to 21 OCT 2010

10210

## AIRPORT DIAGRAM

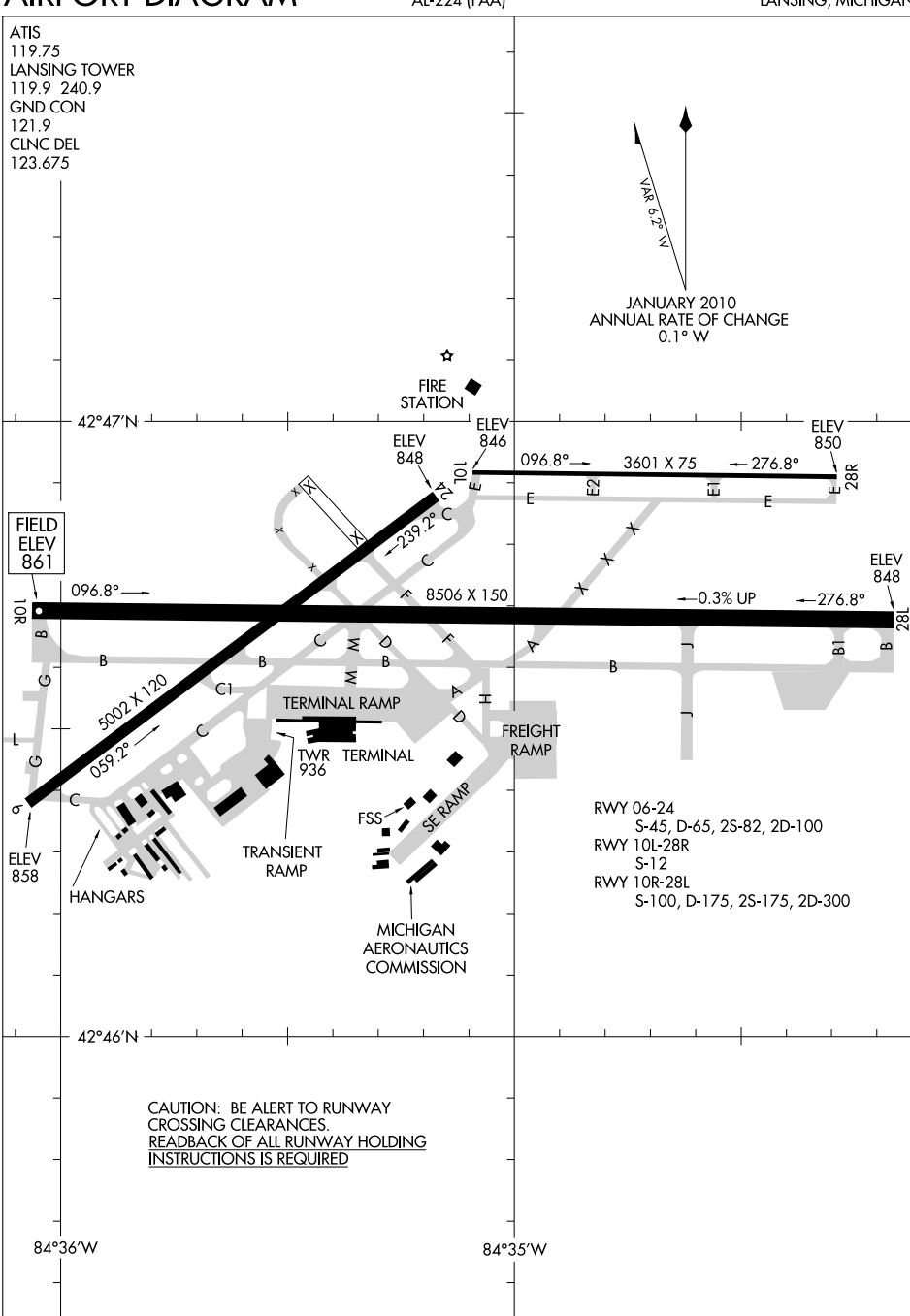
AL-224 (FAA)

LANSING/CAPITAL REGION INTL (L.A.N)  
LANSING, MICHIGAN

ATIS  
119.75  
LANSING TOWER  
119.9 240.9  
GND CON  
121.9  
CLNC DEL  
123.675

VAR 6.2° N  
JANUARY 2010  
ANNUAL RATE OF CHANGE  
0.1° W

EC-1, 23 SEP 2010 to 21 OCT 2010



EC-1, 23 SEP 2010 to 21 OCT 2010

## AIRPORT DIAGRAM

10210

LANSING, MICHIGAN  
LANSING/CAPITAL REGION INTL (L.A.N)

## LANSING

**CAPITAL REGION INTL** (LAN) 3 NW UTC-5(-4DT) N42°46.72' W84°35.17'

861 B S4 FUEL 100LL, JET A OX 1 AOE ARFF Index—See Remarks

DETROIT

H-5E, 10G, L-28J

IAP, AD

**RWY 10R-28L:** H8506X150 (ASPH-GRVD) S-100, D-175, 2S-175, 2D-300 HIRL

**RWY 10R:** MALSR. **RWY 28L:** MALSR.

**RWY 06-24:** H5002X120 (ASPH) S-45, D-65, 2S-82, 2D-100 MIRL

**RWY 06:** REIL. PAPI(P4L)—GA 3.0° TCH 40'. Road.

**RWY 24:** REIL. PAPI(P4L)—GA 3.0° TCH 42'. Trees.

**RWY 10L-28R:** H3601X75 (ASPH) S-12 MIRL

**RWY 10L:** Trees. **RWY 28R:** Road.

**AIRPORT REMARKS:** Attended continuously. Birds on and in/ovf arpt.

Class I, ARFF Index B. ARFF index C avbl on request; call arpt manager 517-321-6121. Rwy 10L-28R not avbl to air carrier acft with more than 9 passenger seats. Twy A N of Rwy 28; Twys E and G not avbl to air carrier acft with more than 9 passenger seats. Ldg fee. Acft blo 6500 lbs exempt from ldg fee. Intl arrivals accepted up to 20 passenger seats. Flight Notification Service (ADCUS) avbl.

**WEATHER DATA SOURCES:** ASOS (517) 886-0015. LLWAS.

**COMMUNICATIONS:** ATIS 119.75 UNICOM 122.95

**LANSING RCO** 122.2 (LANSING RADIO)

Ⓡ **LANSING APP/DEP CON** 133.475 (North) 118.65 (South)

**LANSING TOWER** 119.9 **GND CON** 121.9 **CLNC DEL** 123.675

**AIRSPACE:** CLASS C svc continuous etc APP CON

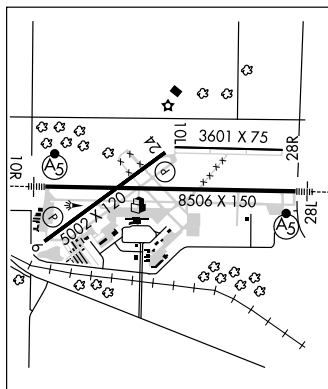
**RADIO AIDS TO NAVIGATION:** NOTAM FILE LAN.

**LANSING (L) VORTACW** 110.8 LAN Chan 45 N42°43.04' W84°41.85' 058° 6.1 NM to fld. 887/5W.

**ILS** 110.1 I-LAN Rwy 28L.

**ILS** 111.7 I-CPQ Rwy 10R. Class ID. ILS unusable byd 25° left and right of course.

ASR



## LAPEER

**DUPONT-LAPEER** (D95) 2 NE UTC-5(-4DT) N43°03.99' W83°16.31'

834 B S4 FUEL 100LL NOTAM FILE LAN

**RWY 18-36:** H3800X75 (ASPH) MIRL

**RWY 18:** REIL. PAPI(P4L)—GA 4.0° TCH 36'. Trees.

**RWY 36:** REIL. PAPI (P2L)—GA 4.0° TCH 33'. Trees.

**RWY 09-27:** 1900X150 (TURF)

**RWY 09:** Thld dspcd 500'. Bldg. **RWY 27:** Trees.

**AIRPORT REMARKS:** Attended 1300-2300Z. Arpt unattended

Christmas, New Year's, Easter Sun and Thanksgiving day. Rwy 09-27 CLOSED Nov thru Apr and when snow covered. Two center and S twy connectors clsd indef. Rwy 09-27 and dspcd thld marked with 3' yellow cones. Twy lgts OTS indef. Rotating bcn opr dusk-0400Z. For rotating bcn after 0400Z ACTIVATE—CTAF. ACTIVATE MIRL Rwy 18-36, PAPI Rwy 18 and Rwy 36 and REIL Rwy 18 and Rwy 36—CTAF.

**COMMUNICATIONS:** CTAF/UNICOM 123.0

**FLINT RCO** 122.3 (LANSING RADIO)

Ⓡ **FLINT APP/DEP CON** 128.55 (N/W of active rwy) 118.8 (E/S of active rwy) (1045-0430Z)

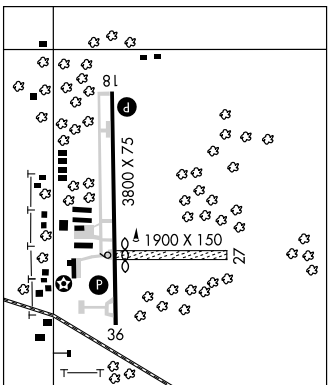
**CLEVELAND CENTER APP/DEP CON** 127.7 (0430-1045Z)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE FNT.

**FLINT (H) VORTACW** 116.9 FNT Chan 116 N42°58.01'

W83°44.82' 079° 21.8 NM to fld. 772/6W.

**COMM/NAV/WEATHER REMARKS:** APP CON sectorization based upon Flint rwy usage. APP/DEP CON and CLNC DEL not available on the ground.



DETROIT

L-28J

IAP

**LENAAWEE CO** (See ADRIAN)

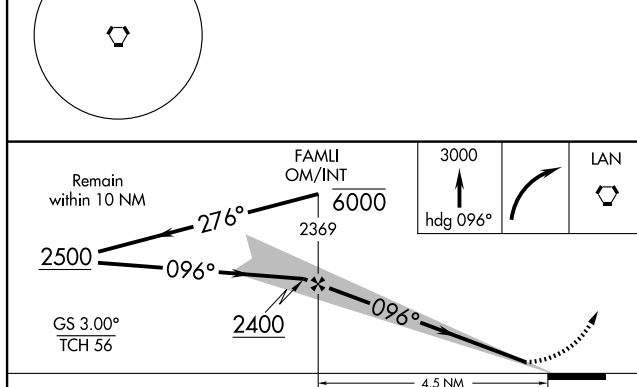
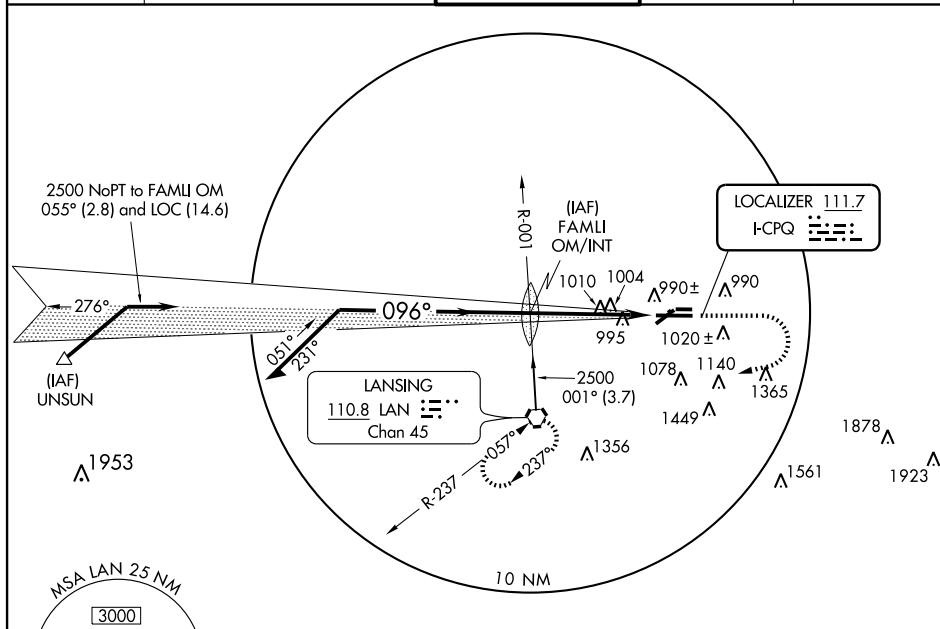
**LEO E. GOETZ CO** (See ONAWAY)

LOC I-CPQ <b>111.7</b>	APP CRS <b>096°</b>	Rwy Idg <b>8506</b> TDZE <b>861</b> Apt Elev <b>861</b>
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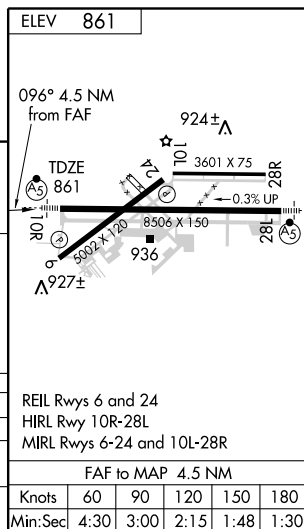
# ILS or LOC RWY 10R

LANSING/CAPITAL REGION INTL (LAN)

<div><div><div><div><div></div><div>ASR</div></div></div><div><div>*RVR 1800 authorized with the use of FD or AP or HUD to DA.</div></div></div></div>		<div><div><div><div></div><div>MALSR</div></div><div><div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div></div></div></div></div>	<div><div><div>MISSED APPROACH: Climb to 3000 via heading 096°, then right turn direct LAN VORTAC and hold.</div></div></div>		
<div><div><div>ATIS</div><div>119.75</div></div></div>	<div><div><div>LANSING APP CON</div><div><div>133.475 226.4 (NORTH)</div><div>118.65 226.4 (SOUTH)</div></div></div></div>	<div><div><div>LANSING TOWER</div><div>119.9 240.9</div></div></div>	<div><div><div>GND CON</div><div>121.9</div></div></div>	<div><div><div>CLNC DEL</div><div>123.675</div></div></div>	



CATEGORY	A	B	C	D
S-ILS 10R	*1061/24 200 (200-½)			
S-LOC 10R	1320/24	459 (500-½)	1320/40 459 (500-¾)	1320/50 459 (500-1)
CIRCLING	1380-1	519 (600-1)	1380-1½ 519 (600-1½)	1440-2 579 (600-2)





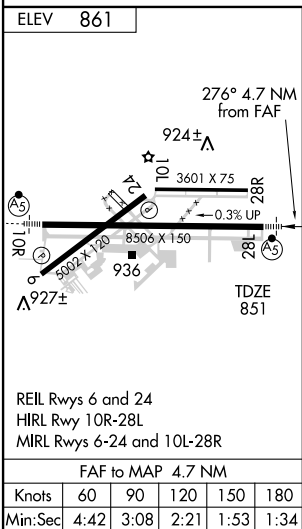
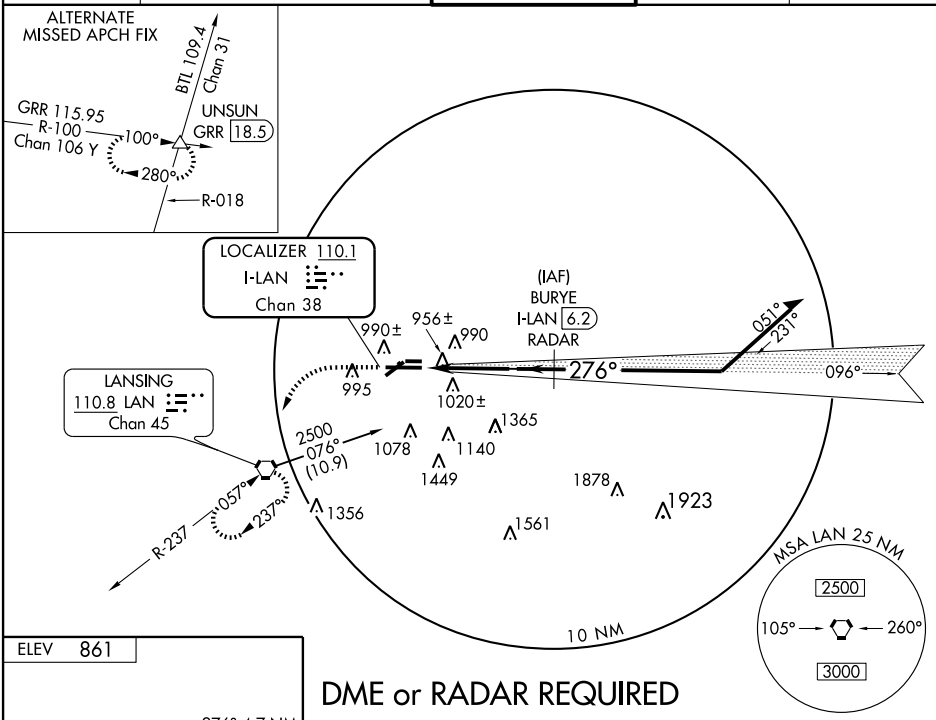
LOC/DME I-LAN <b>110.1</b> Chan <b>38</b>	APP CRS <b>276°</b>	Rwy Idg TDZE <b>851</b> Apt Elev <b>861</b>
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# ILS or LOC RWY 28L

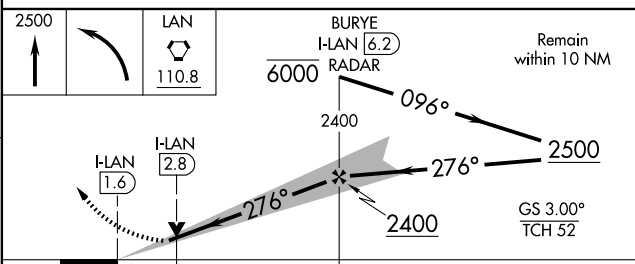
LANSING/CAPITAL REGION INTL (LAN)

<b>▼</b> DME or RADAR REQUIRED. <b>ASR</b> *RVR 1800 authorized with the use of FD or AP or HUD to DA.	<b>MALS</b> 	<b>MISSED APPROACH:</b> Climb to 2500, then left turn direct LAN VORTAC and hold.
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<b>ATIS</b> <b>119.75</b>	<b>LANSING APP CON</b> <b>133.475 226.4 (NORTH)</b> <b>118.65 226.4 (SOUTH)</b>	<b>LANSING TOWER</b> <b>119.9 240.9</b>	<b>GND CON</b> <b>121.9</b>	<b>CLNC DEL</b> <b>123.675</b>
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## DME or RADAR REQUIRED



CATEGORY	A	B	C	D
S-ILS 28L	* 1051/24 200 (200-½)			
S-LOC 28L	1300/24 449 (500-½)	1300/40 519 (600-¾)	1300/50 449 (500-1)	1300/50 449 (500-1)
CIRCLING	1380-1 519 (600-1)	1380-1½ 519 (600-1½)	1440-2 579 (600-2)	1440-2 579 (600-2)

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010

WAAS CH <b>82118</b> <b>W06A</b>	APP CRS <b>058°</b>	Rwy Idg TDZE <b>858</b> Apt Elev <b>861</b>	<b>5002</b> <b>858</b> <b>861</b>
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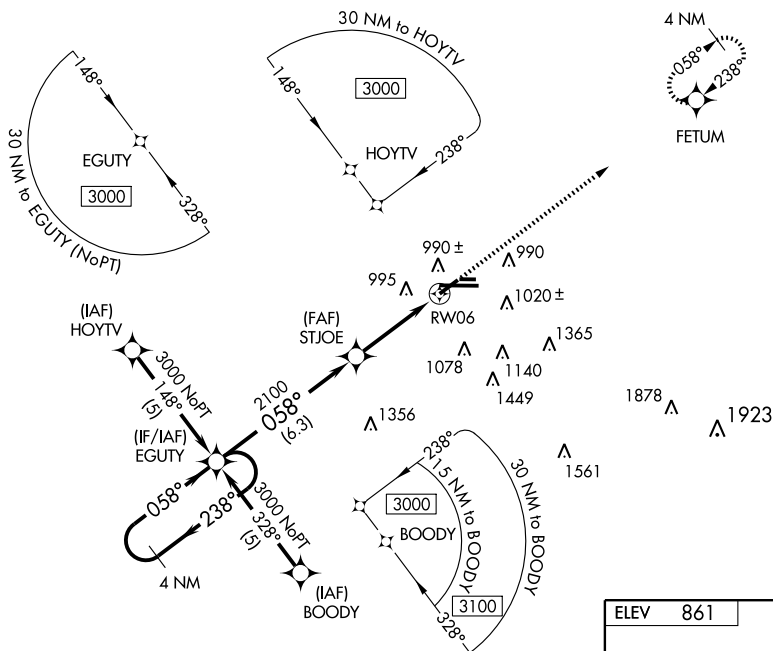
# RNAV (GPS) RWY 6

LANSING/CAPITAL REGION INTL (LAN)

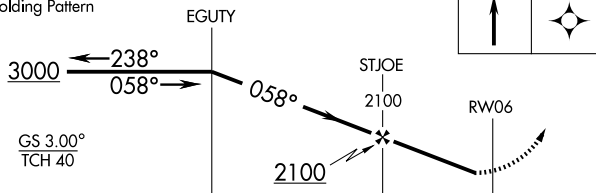
**ASR** For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 46°C (114°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 3000 direct FETUM and hold.

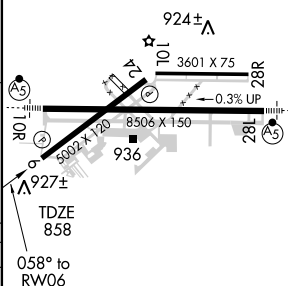
ATIS <b>119.75</b>	LANSING APP CON <b>133.475 226.4 (NORTH)</b> <b>118.65 226.4 (SOUTH)</b>	LANSING TOWER <b>119.9 240.9</b>	GND CON <b>121.9</b>	CLNC DEL <b>123.675</b>
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4 NM  
Holding Pattern



ELEV 861



CATEGORY	A	B	C	D
LPV DA	1140-1	282 (300-1)		
LNAV/VNAV DA	1338-1 $\frac{3}{4}$	480 (500-1 $\frac{3}{4}$ )		
LNAV MDA	1340-1 482 (500-1)	1340-1 $\frac{1}{4}$ 482 (500-1 $\frac{1}{4}$ )	1340-1 $\frac{1}{2}$ 482 (500-1 $\frac{1}{2}$ )	
CIRCLING	1380-1 519 (600-1)	1380-1 $\frac{1}{2}$ 519 (600-1 $\frac{1}{2}$ )	1440-2 579 (600-2)	

REIL Rwy 6 and 24  
HIRL Rwy 10R-28L  
MIRL Rwy 6-24 and 10L-28R

WAAS  
CH **61314**  
**W10A**

APP CRS  
**096°**

Rwy Idg **8506**  
TDZE **861**  
Apt Elev **861**

# RNAV (GPS) RWY 10R

LANSING/CAPITAL REGION INTL (L.A.N.)

**ASR** For uncompensated Baro-VNAV systems, LNAV/VNAV  
NA below -16°C (4°F) or above 47°C (116°F).  
DME/DME RNP-0.3 NA.



**MISSED APPROACH:** Climb to  
3000 direct DUTVE and hold.

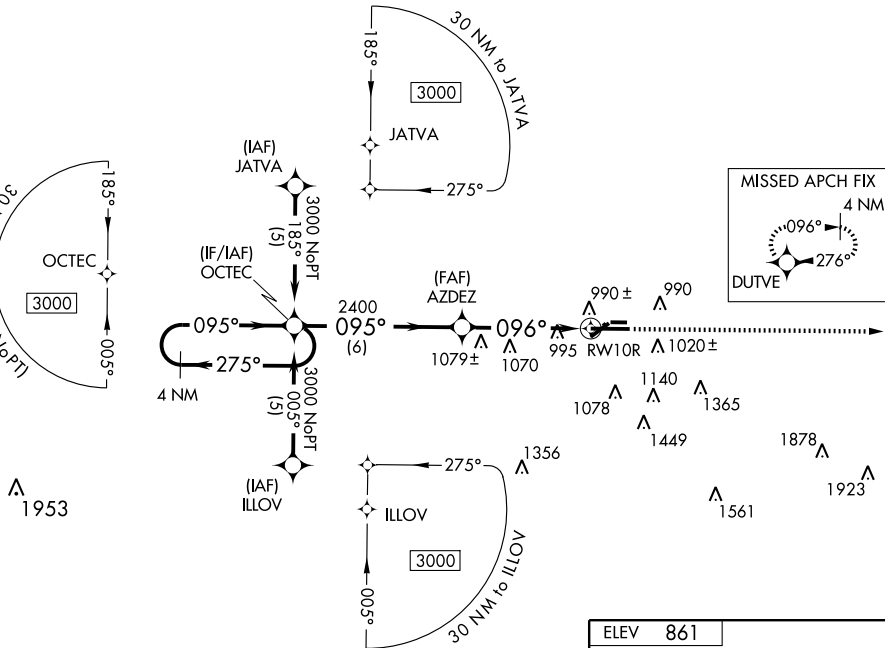
ATIS  
**119.75**

LANSING APP CON  
**133.475 226.4** (NORTH)  
**118.65 226.4** (SOUTH)

LANSING TOWER  
**119.9 240.9**

GND CON  
**121.9**

CLNC DEL  
**123.675**



4 NM  
Holding Pattern

OCTEC  
3000 ← 275°  
095° →

GS 3.00°  
TCH 56

AZDEZ

2400  
095°  
096°  
RWY 10R

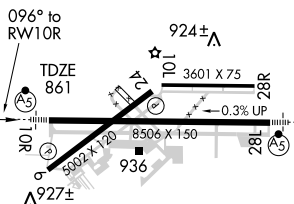
3000



DUTVE

\*1.3 NM to RWY 10R  
\*LNAV only

ELEV 861



CATEGORY	A	B	C	D
LPV DA	1061/24		200 (200-½)	
LNAV/VNAV DA	1290/50		429 (500-1)	
LNAV MDA	1320/24	459 (500-½)	1320/40 459 (500-¾)	1320/50 459 (500-1)
CIRCLING	1380-1	519 (600-1)	1380-1½ 519 (600-1½)	1440-2 579 (600-2)

REIL Rwy 6 and 24  
HIRL Rwy 10R-28L  
MIRL Rwy 6-24 and 10L-28R

WAAS  
CH **50413**  
**W24A**

APP CRS  
**238°**

Rwy Idg  
TDZE  
Apt Elev

**5002**  
**857**  
**861**

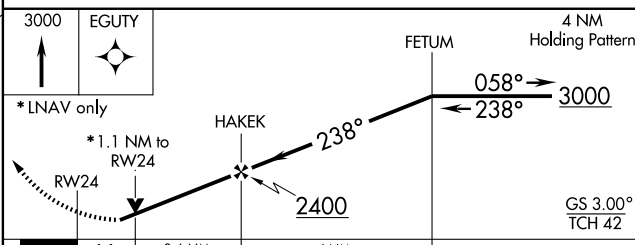
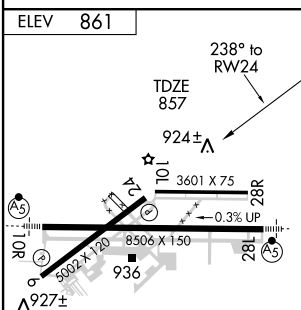
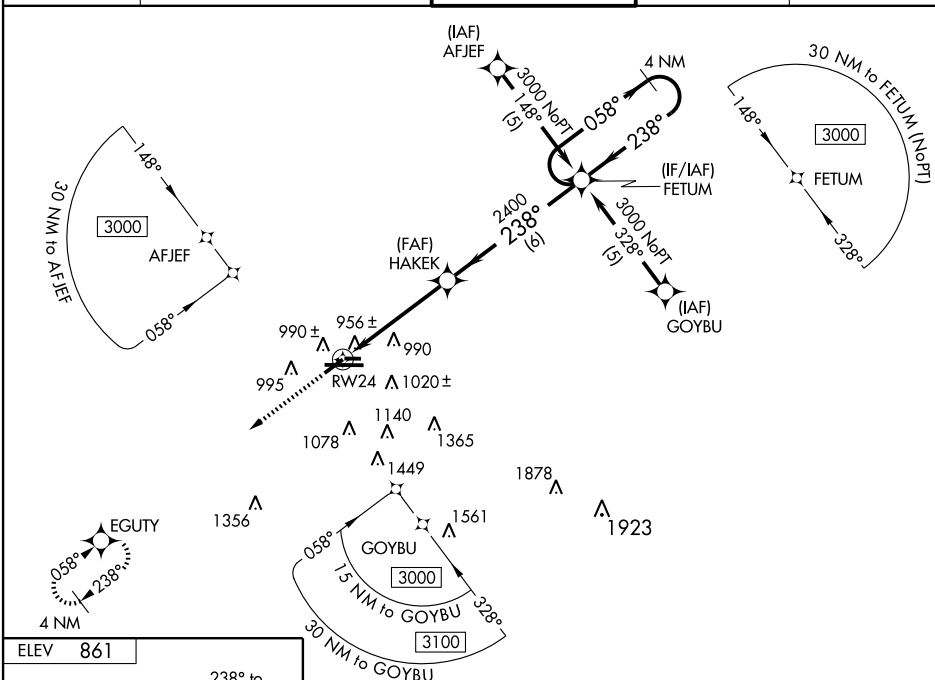
# RNAV (GPS) RWY 24

LANSING/CAPITAL REGION INTL (LAN)

**ASR** For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA.  
Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 3000 direct EGUTY and hold.

ATIS <b>119.75</b>	LANSING APP CON <b>133.475 226.4</b> (NORTH) <b>118.65 226.4</b> (SOUTH)	LANSING TOWER <b>119.9 240.9</b>	GND CON <b>121.9</b>	CLNC DEL <b>123.675</b>
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CATEGORY	A	B	C	D
LPV DA	1215-1¼	358 (400-1¼)		
LNAV/VNAV DA	1254-1½	397 (400-1½)		
LNAV MDA	1240-1	383 (400-1)	1240-1¼	383 (400-1¼)
CIRCLING	1380-1	519 (600-1)	1380-1½	1440-2
			519 (600-1½)	579 (600-2)

REIL Rws 6 and 24  
HIRL Rwy 10R-28L  
MIRL Rws 6-24 and 10L-28R

WAAS CH <b>40414</b> <b>W28A</b>	APP CRS <b>276°</b>	Rwy Idg <b>8506</b> TDZE <b>851</b> Apt Elev <b>861</b>
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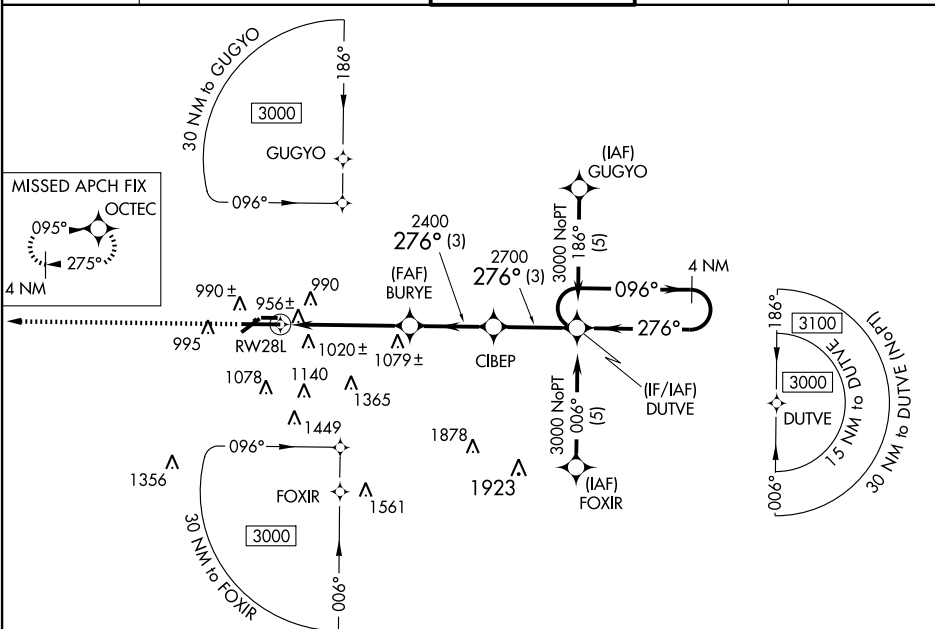
RNAV (GPS) RWY 28L  
LANSING/CAPITAL REGION INTL (LAN)

**ASR** For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F).  
DME/DME RNP-0.3 NA.

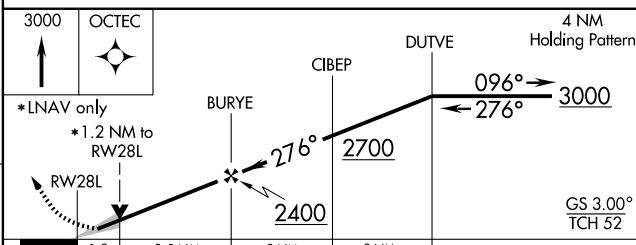
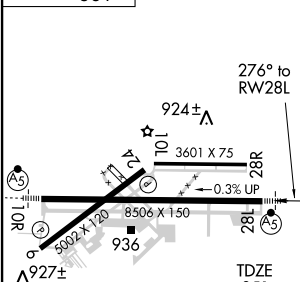
MALSR

MISSED APPROACH: Climb to 3000 direct OCTEC and hold.

ATIS <b>119.75</b>	LANSING APP CON <b>133.475 226.4</b> (NORTH) <b>118.65 226.4</b> (SOUTH)	LANSING TOWER <b>119.9 240.9</b>	GND CON <b>121.9</b>	CLNC DEL <b>123.675</b>
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ELEV 861



	1.2	3.5 NM	3 NM	3 NM	
CATEGORY	A		B	C	D
LPV DA	1051/24 200 (200-½)				
LNAV/ VNAV DA	1370/60 519 (600-1¼)				
LNAV MDA	1280/24 429 (500-½)			1280/40 429 (500-¾)	1280/50 429 (500-1)
CIRCLING	1380-1	519 (600-1)	1380-1½ 519 (600-1½)	1440-2 579 (600-2)	

REIL Rwy 6 and 24  
HIRL Rwy 10R-28L  
MIRL Rwy 6-24 and 10L-28R

LANRING, MICHIGAN  
Orig 10098

42°47'N - 84°35'W

LANSGING/CAPITAL REGION INTL (LAN)  
RNAV (GPS) RWY 28L

EC-1. 23 SEP 2010 to 21 OCT 2010

VORTAC LAN <b>110.8</b> Chan <b>45</b>	APP CRS <b>057°</b>	Rwy Idg <b>5002</b> TDZE <b>858</b> Apt Elev <b>861</b>
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**VOR RWY 6**

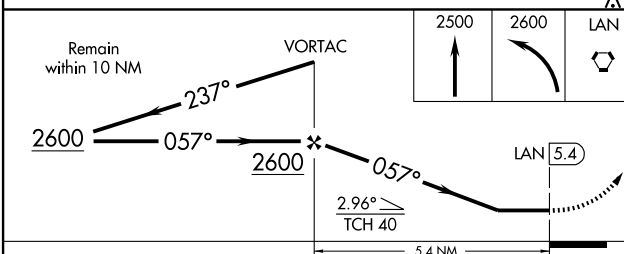
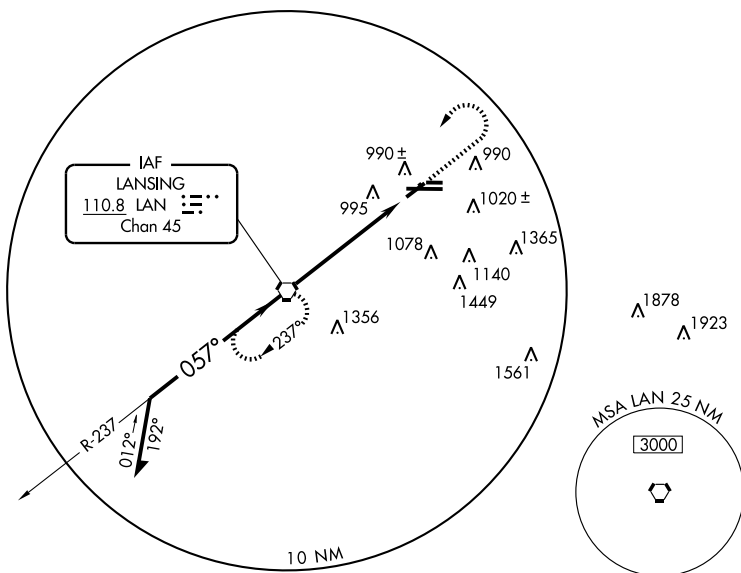
LANSING/CAPITAL REGION INTL (LAN)



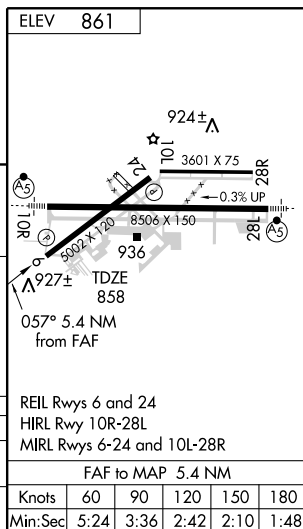
Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 2500 then climbing left turn to 2600 direct LAN VORTAC and hold.

ATIS <b>119.75</b>	LANSING APP CON <b>133.475 226.4</b> (NORTH) <b>118.65 226.4</b> (SOUTH)	LANSING TOWER <b>119.9 240.9</b>	GND CON <b>121.9</b>	CLNC DEL <b>123.675</b>
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CATEGORY	A	B	C	D
S-6	1340-1	482 (500-1)	1340-1¼ 482 (500-1¼)	1340-1½ 482 (500-1½)
CIRCLING	1380-1	519 (600-1)	1380-1½ 519 (600-1½)	1440-2 579 (600-2)



LANSING, MICHIGAN

Amdt 25 29JUL10

42°47'N - 84°35'W

LANSING/CAPITAL REGION INTL (LAN)

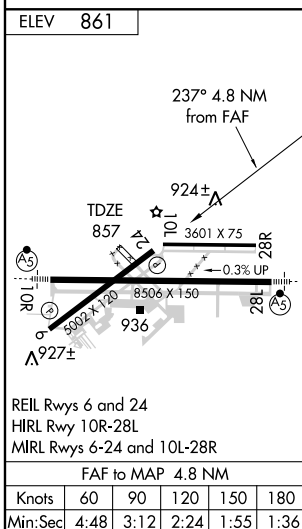
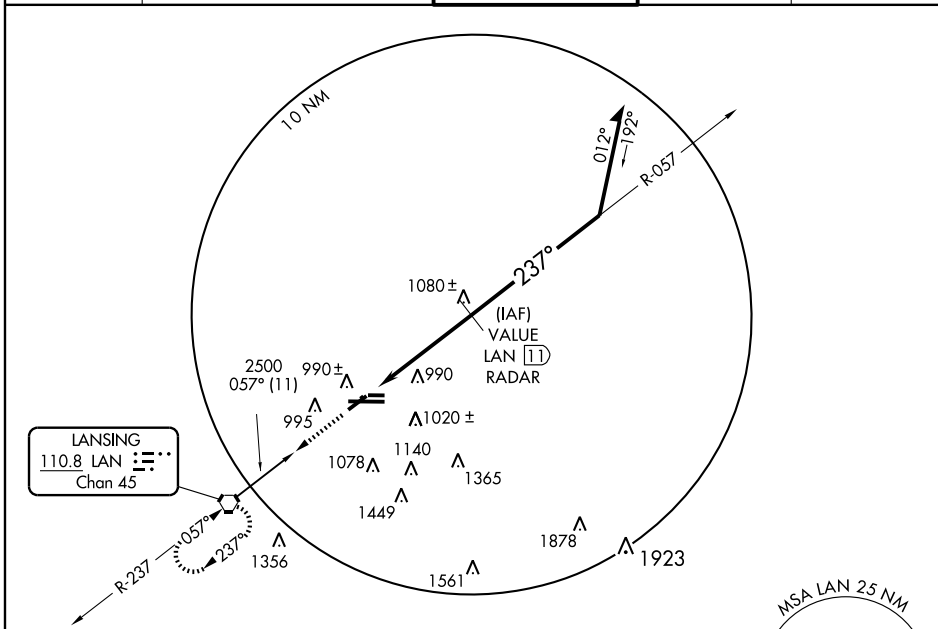
**VOR RWY 6**

VORTAC LAN <b>110.8</b> Chan <b>45</b>	APP CRS <b>237°</b>	Rwy Idg TDZE <b>857</b> Apt Elev <b>861</b>
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**VOR RWY 24**

LANSING/CAPITAL REGION INTL (LAN)

<b>V</b> ASR DME or RADAR Required. Visibility reduction by helicopters NA.		MISSED APPROACH: Climb to 2500 direct LAN VORTAC and hold.		
ATIS <b>119.75</b>	LANSING APP CON <b>133.475 226.4</b> (NORTH) <b>118.65 226.4</b> (SOUTH)	<b>LANSING TOWER</b> <b>119.9 240.9</b>	GND CON <b>121.9</b>	CLNC DEL <b>123.675</b>



<b>DME or RADAR REQUIRED</b>			
ELEV <b>861</b>	2500 LAN 110.8	VALUE LAN <b>11</b> RADAR	Remain within 10 NM
CATEGORY	A	B	C
S-24	1260-1 403 (400-1)	1260-1 1/4 403 (400-1 1/4)	
CIRCLING	1380-1 519 (600-1)	1380-1 1/2 519 (600-1 1/2)	1440-2 579 (600-2)

**VOR RWY 24**

## LANSING

**CAPITAL REGION INTL** (LAN) 3 NW UTC-5(-4DT) N42°46.72' W84°35.17'

861 B S4 FUEL 100LL, JET A OX 1 AOE ARFF Index—See Remarks  
NOTAM FILE LAN

DETROIT

H-5E, 10G, L-28J  
IAP, AD

**RWY 10R-28L:** H8506X150 (ASPH-GRVD) S-100, D-175, 2S-175,  
2D-300 HIRL

**RWY 10R:** MALSR. **RWY 28L:** MALSR.

**RWY 06-24:** H5002X120 (ASPH) S-45, D-65, 2S-82,  
2D-100 MIRL

**RWY 06:** REIL. PAPI(P4L)—GA 3.0° TCH 40'. Road.

**RWY 24:** REIL. PAPI(P4L)—GA 3.0° TCH 42'. Trees.

**RWY 10L-28R:** H3601X75 (ASPH) S-12 MIRL

**RWY 10L:** Trees. **RWY 28R:** Road.

**AIRPORT REMARKS:** Attended continuously. Birds on and in/ovf arpt.  
Class I, ARFF Index B. ARFF index C avbl on request; call arpt  
manager 517-321-6121. Rwy 10L-28R not avbl to air carrier acft  
with more than 9 passenger seats. Twy A N of Rwy 28; Twys E and  
G not avbl to air carrier acft with more than 9 passenger seats.  
Ldg fee. Acft blo 6500 lbs exempt from ldg fee. Intl arrivals  
accepted up to 20 passenger seats. Flight Notification Service  
(ADCUS) avbl.

**WEATHER DATA SOURCES:** ASOS (517) 886-0015. LLWAS.

**COMMUNICATIONS:** ATIS 119.75 UNICOM 122.95

**LANSING RCO** 122.2 (LANSING RADIO)

Ⓡ **LANSING APP/DEP CON** 133.475 (North) 118.65 (South)

**LANSING TOWER** 119.9 **GND CON** 121.9 **CLNC DEL** 123.675

**AIRSPACE:** CLASS C svc continuous etc APP CON

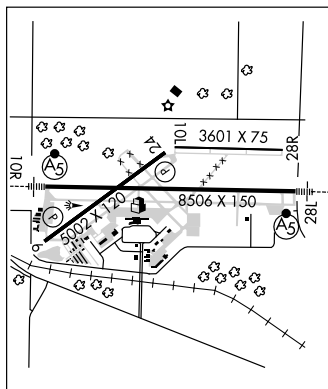
**RADIO AIDS TO NAVIGATION:** NOTAM FILE LAN.

**LANSING (L) VORTACW** 110.8 LAN Chan 45 N42°43.04' W84°41.85' 058° 6.1 NM to fld. 887/5W.

**ILS** 110.1 I-LAN Rwy 28L.

**ILS** 111.7 I-CPQ Rwy 10R. Class ID. ILS unusable byd 25° left and right of course.

ASR



## LAPEER

**DUPONT-LAPEER** (D95) 2 NE UTC-5(-4DT) N43°03.99' W83°16.31'

834 B S4 FUEL 100LL NOTAM FILE LAN

**RWY 18-36:** H3800X75 (ASPH) MIRL

**RWY 18:** REIL. PAPI(P4L)—GA 4.0° TCH 36'. Trees.

**RWY 36:** REIL. PAPI (P2L)—GA 4.0° TCH 33'. Trees.

**RWY 09-27:** 1900X150 (TURF)

**RWY 09:** Thld dspcd 500'. Bldg. **RWY 27:** Trees.

**AIRPORT REMARKS:** Attended 1300-2300Z. Arpt unattended  
Christmas, New Year's, Easter Sun and Thanksgiving day. Rwy  
09-27 CLOSED Nov thru Apr and when snow covered. Two center  
and S twy connectors clsd indef. Rwy 09-27 and dspcd thld  
marked with 3' yellow cones. Twy lgts OTS indef. Rotating bcn opr  
dusk-0400Z. For rotating bcn after 0400Z ACTIVATE—CTAF.  
ACTIVATE MIRL Rwy 18-36, PAPI Rwy 18 and Rwy 36 and REIL  
Rwy 18 and Rwy 36—CTAF.

**COMMUNICATIONS:** CTAF/UNICOM 123.0

**FLINT RCO** 122.3 (LANSING RADIO)

Ⓡ **FLINT APP/DEP CON** 128.55 (N/W of active rwy) 118.8 (E/S of active  
rwy) (1045-0430Z)

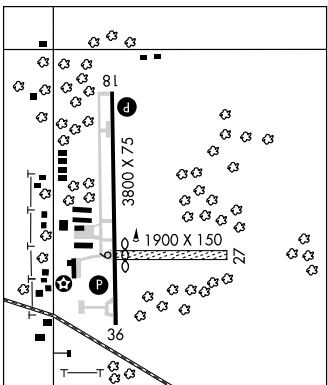
**CLEVELAND CENTER APP/DEP CON** 127.7 (0430-1045Z)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE FNT.

**FLINT (H) VORTACW** 116.9 FNT Chan 116 N42°58.01'

W83°44.82' 079° 21.8 NM to fld. 772/6W.

**COMM/NAV/WEATHER REMARKS:** APP CON sectorization based upon Flint rwy usage. APP/DEP CON and CLNC DEL not  
available on the ground.



DETROIT

L-28J

IAP

**LENAWEE CO** (See ADRIAN)

**LEO E. GOETZ CO** (See ONAWAY)



VORTAC FNT <b>116.9</b> Chan <b>116</b>	APP CRS <b>080°</b>	Rwy Idg TDZE Apt Elev	<b>N/A</b> <b>N/A</b> <b>844</b>
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**VOR-A**  
LAPEER/ DUPONT-LAPEER (D95)



Use Flint altimeter setting.

MISSED APPROACH: Climbing left turn to 2500 via  
FNT R-080 to MIXED INT/FNT 16 DME and hold.

FLINT APP CON ★  
**118.8 257.9**

UNICOM  
**123.0** (CTAF) **0**

IAF  
FLINT  
116.9 FNT  
Chan 116

3000  
080°  
(10)

COLBA INT  
FNT **10**

2500  
080°  
(6)

1085

MIXED INT  
FNT **16**

1300

1207

1156 ±

1849

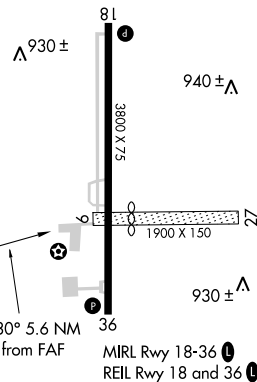
10 NM MSA FNT 25 NM

**3100**

CAUTION: NE/SW drag strip  
2 miles North of Airport.

PONTIAC  
111.0 PSI  
Chan 47

ELEV **844** Rwy 9 Idg 1400'



COLBA INT  
FNT **10**

MIXED INT  
FNT **16**

2500  
FNT R-080  
116.9

MIXED  
INT

FNT **21.6**

Procedure  
Turn  
NA

2500

6 NM

5.6 NM

CATEGORY	A	B	C	D
CIRCLING	1460-1 616 (700-1)	1460-1¼ 616 (700-1¼)	1460-1¾ 616 (700-1¾)	NA

FAF to MAP 5.6 NM					
Knots	60	90	120	150	180
Min:Sec	5:36	3:44	2:48	2:14	1:52

## LEWISTON

GARLAND (8M8) 5 SE UTC-5(-4DT) N44°48.39' W84°16.57'

1218 B NOTAM FILE LAN

RWY 18-36: H5047X75 (ASPH) S-15 MIRL

RWY 18: Trees. RWY 36: PAPI(P2L)—GA 3.0° TCH 41'. Thld dsplcd 400'. Tree.

AIRPORT REMARKS: Unattended. Rwy 18-36 sfc large cracks in pavement. Non-aviation related cargo ops on north ramp. No acft parking. Acft use west ramp. Fence around arpt—keep gate clsd. ACTIVATE MIRL Rwy 18-36—CTAF. Landing fee.

COMMUNICATIONS: CTAF/UNICOM 122.8

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

GAYLORD (L) VOR/DME 109.2 GLR Chan 29 N45°00.75' W84°42.26' 130° 22NM to fld. 1318/4W.

LAKE HURON

H-2L, 11A, L-31C

## LINCOLN

FLYING M RANCH (3L7) 3 NE UTC-5(-4DT) N44°44.30' W83°22.78'

830 NOTAM FILE LAN

RWY 09-27: 2200X90 (TURF)

RWY 09: Thld dsplcd 600'. P-line. RWY 27: Trees.

AIRPORT REMARKS: Attended May-Oct irregularly. Arpt CLOSED Nov-Apr and when snow covered. No snow removal. Occasional deer on rwy. Rwy 09-27 surface slightly rough and irregular on rolling terrain. Rwy slopes down from west to east. Rwy soft in spring. Rwy 09 p-line marked with orange balls.

COMMUNICATIONS: CTAF/UNICOM 123.0

LAKE HURON

## LINDEN

PRICES (9G2) 1 S UTC-5(-4DT) N42°48.46' W83°46.20'

920 B S2 FUEL 100LL NOTAM FILE LAN

RWY 09-27: H4000X75 (ASPH) MIRL 0.3% up W

RWY 09: REIL. Thld dsplcd 268'. Trees.

RWY 27: Thld dsplcd 800'. Trees.

AIRPORT REMARKS: Attended irregularly. Deer and birds on and in/ovf arpt. Airframe repairs: prior arrangement. ACTIVATE MIRL Rwy 09-27 and REIL Rwy 09—CTAF.

COMMUNICATIONS: CTAF/UNICOM 123.0

FLINT RCO 122.3 (LANSING RADIO)

Ⓡ FLINT APP/DEP CON 128.55 (N/W of active rwy) 118.8 (E/S of active rwy) (1045-0430Z±)

CLEVELAND CENTER APP/DEP CON 126.75 (0430-1045Z±)

RADIO AIDS TO NAVIGATION: NOTAM FILE FNT.

FLINT (H) VORTACW 116.9 FNT Chan 116 N42°58.01'

W83°44.82' 193° 9.6 NM to fld. 772/6W.

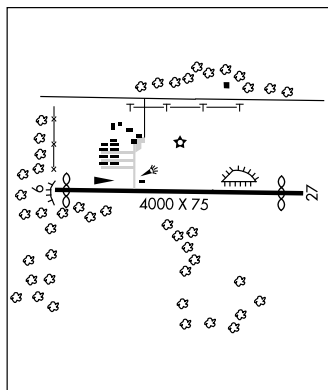
COMM/NAV/WEATHER REMARKS: APP CON sectorization based upon Flint rwy usage.

DETROIT

COTTER

L-28J

IAP



LITCHFIELD N42°03.75' W84°45.91' NOTAM FILE LAN.

(L) VOR/DME 111.2 LFD Chan 49 141° 11.7 NM to Hillsdale Muni. 1040/05W.

DME unusable 110°-165° byd 35 NM below 3000'.

RCO 122.1R 111.2T (LANSING RADIO)

DETROIT

H-5E, 10G, L-28J

LIVINGSTON CO SPENCER J. HARDY (See HOWELL)

LOST CREEK (See LUZERNE)

APP CRS <b>095°</b>	Rwy Idg TDZE Apt Elev	<b>3732</b> <b>919</b> <b>920</b>
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**RNAV (GPS) RWY 9**

LINDEN/ PRICE'S (9G2)

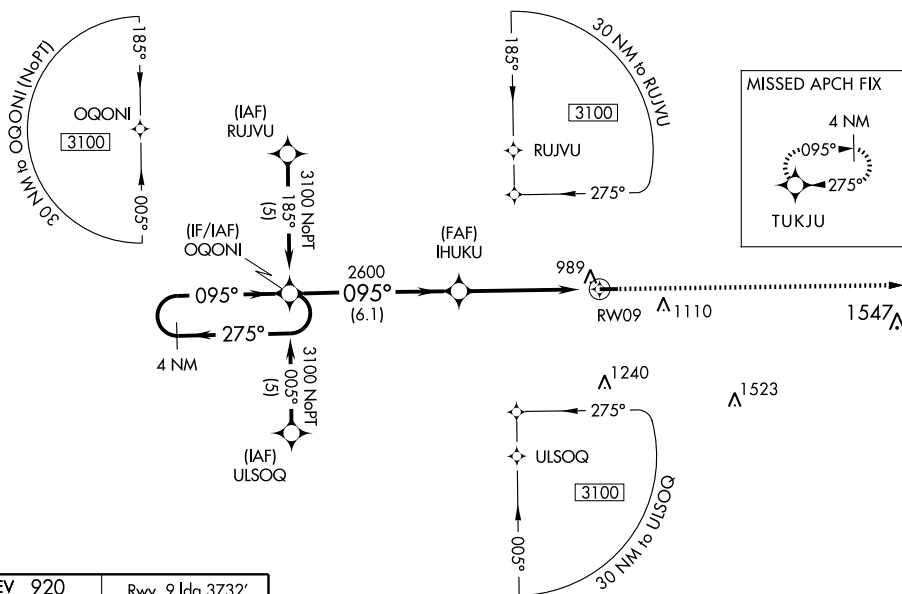
**▼** Use Flint altimeter setting; when not received, use  
**▲** NA Howell altimeter setting. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 2900  
 direct TUKJU and hold.

FLINT ASOS  
**133.15**

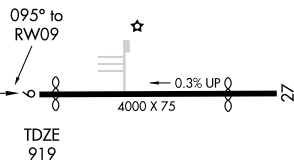
FLINT APP CON ★  
**118.8 257.9**

UNICOM  
**123.0 (CTAF) 0**

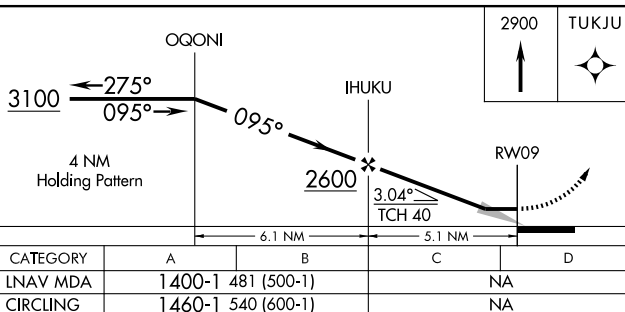


ELEV 920

Rwy 9 Idg 3732'  
 Rwy 27 Idg 3200'



REIL Rwy 9 **0**  
 MRL Rwy 9-27 **0**



APP CRS	Rwy Idg	3200
275°	TDZE	915
	Apt Elev	920

## RNAV (GPS) RWY 27

LINDEN/ PRICE'S (9G2)



Use Flint altimeter setting; when not received, use Howell altimeter setting. DME/DME RNP-0.3 NA.

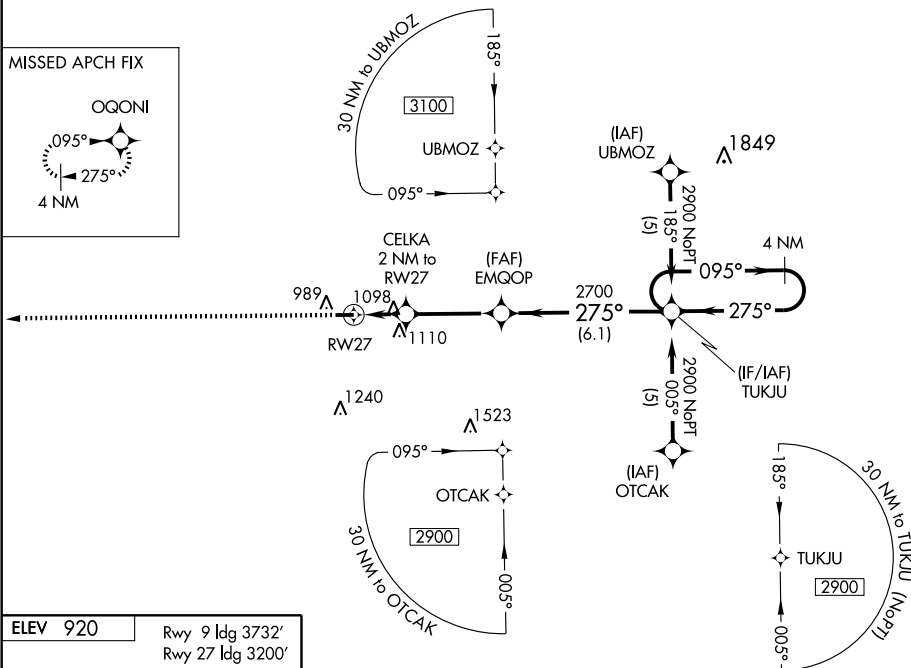
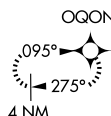
MISSED APPROACH: Climb to 3100  
direct OQONI and hold.

FLINT ASOS  
**133.15**

FLINT APP CON★  
118.8 257.9

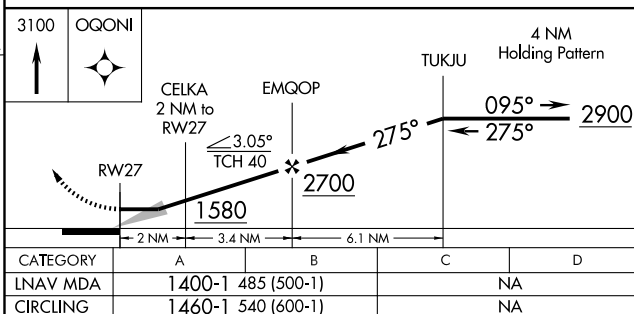
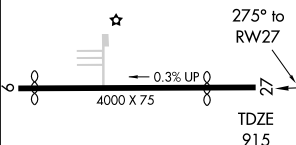
UNICOM  
123.0 (CTAF) **L**

MISSED APCH FIX



ELEV	920
------	-----

Rwy 9 ldg 3732'  
Rwy 27 ldg 3200'



REIL Rwy 9 **L**  
MIRL Rwy 9-27 **L**

LINDEN, MICHIGAN

Amdt 1 08185

42°48'N - 83°46'W

LINDEN/ PRICE'S (9G2)

RNAV (GPS) RWY 27

EC-1. 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010

VORTAC FNT  
**116.9**  
Chan **116**

APP CRS  
**192°**

Rwy Idg  
TDZE  
Apt Elev

**N/A**  
**N/A**  
**920**

**VOR-A**

LINDEN/ PRICE'S (9G2)



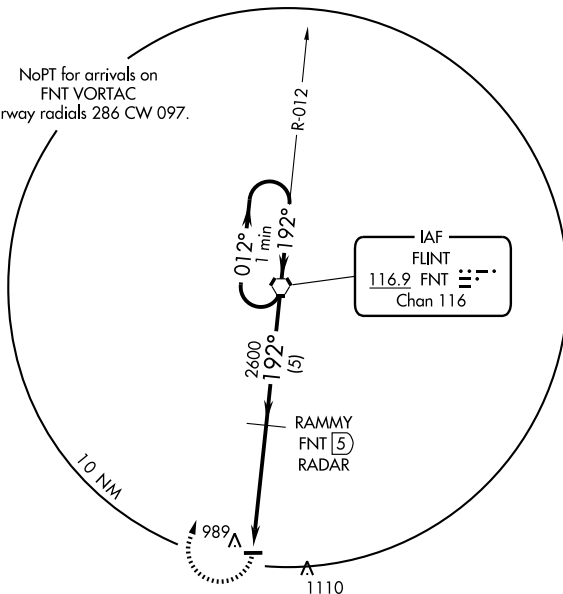
Use Flint altimeter setting.

MISSED APPROACH: Climbing right turn  
to 2600 direct FNT VORTAC and hold.

FLINT APP CON★  
**118.8 257.9**

UNICOM  
**123.0** (CTAF) **0**

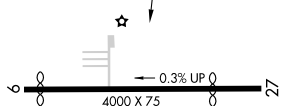
NoPT for arrivals on  
FNT VORTAC  
airway radials 286 CW 097.



ELEV 920

Rwy 9 Idg 3732'  
Rwy 27 Idg 3200'

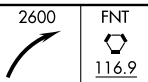
192° 4.4 NM  
from FAF



REIL Rwy 9 **0**  
MIRL Rwy 9-27 **0**

FAF to MAP 4.4 NM

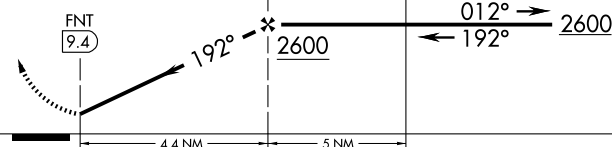
**DME or RADAR REQUIRED**



RAMMY  
FNT **5**  
RADAR

VORTAC

One Minute  
Holding Pattern



Knots	60	90	120	150	180
Min:Sec	4:24	2:56	2:12	1:46	1:28

CATEGORY	A	B	C	D
CIRCLING	1460-1	540 (600-1)		NA

**LOWELL CITY** (24C) 1 N UTC-5(-4DT) N42°57.24' W85°20.64'

CHICAGO

681 S4 FUEL 100LL NOTAM FILE LAN

RWY 06-24: 2700X100 (TURF)

RWY 06: Thld dsplcd 1100'. Trees.

RWY 24: Thld dsplcd 1200'. Trees.

RWY 12-30: H2394X48 (ASPH) LIRL

RWY 12: Thld dsplcd 603'. Tree.

RWY 30: Thld dsplcd 597'. Tree.

RWY 15-33: 1940X100 (TURF)

RWY 15: Thld dsplcd 582'. Tree.

RWY 33: Thld dsplcd 388'. Tree.

**AIRPORT REMARKS:** Attended Apr-Oct Mon-Fri 1230-2200Z†, Nov-Mar Mon-Fri 1300-2100Z†. Snow removal Rwy 12-30 only. Rwy 12-30 extensive cracking length rwy. ACTIVATE LIRL Rwy 12-30—CTAF. Rwy 15-33 and dsplcd thlds marked with three 3' yellow cones. Rwy 06-24 and dsplcd thlds marked with 3' yellow cones.

**COMMUNICATIONS:** CTAF/UNICOM 123.0

**LUCE CO** (See NEWBERRY)

**LUDINGTON** N43°57.77' W86°24.57' NOTAM FILE LDM.

CHICAGO

NDB (MHW) 341 LDM at Mason Co.

L-281

RCO 122.45 (LANSING RADIO)

## LUDINGTON

**MASON CO** (LDM) 2 NE UTC-5(-4DT) N43°57.75' W86°24.48'

CHICAGO

646 B S4 FUEL 100LL, JET A NOTAM FILE LDM

H-2L, L-281

RWY 08-26: H5003X75 (ASPH-PFC) S-25 MIRL

IAP

RWY 08: PAPI(P2L)—GA 3.0° TCH 28'. Trees.

RWY 26: REIL. PAPI(P4L)—GA 3.0° TCH 43'. Trees.

RWY 01-19: H3503X75 (ASPH-PFC) S-19 MIRL

RWY 01: PAPI(P2L).

RWY 19: PAPI(P2L). Trees.

**AIRPORT REMARKS:** Attended Apr-May 1300-2200Z†, Oct-Mar Mon-Fri 1400-2200Z† and Sat-Sun 1300-2200Z†, Jun-Aug 1300-0100Z†, Sep 1300-2200Z†. Birds and deer on and in/ovf arpt. ACTIVATE MIRL Rwy 08-26 and Rwy 01-19 PAPI Rwy 08, Rwy 26, Rwy 01 and Rwy 19, and REIL Rwy 26—CTAF.

**WEATHER DATA SOURCES:** AWOS-3 119.925 (231) 843-0459.

**COMMUNICATIONS:** CTAF/UNICOM 123.0

MANISTEE RCO 122.1R 111.4T (LANSING RADIO)

LUDINGTON RCO 122.45 (LANSING RADIO)

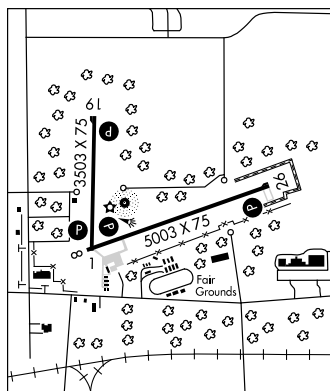
MINNEAPOLIS CENTER APP/DEP CON 120.85

**RADIO AIDS TO NAVIGATION:** NOTAM FILE MBL.

MANISTEE (L) VOR/DME 111.4 MBL Chan 51 N44°16.24'

W86°15.24' 205° 19.6 NM to fld. 618/5W.

LUDINGTON NDB (MHW) 341 LDM N43°57.77' W86°24.57' at fld. NOTAM FILE LDM.



## LUZERNE

**LOST CREEK** (5Y4) 3 NE UTC-5(-4DT) N44°39.60' W84°14.25'

LAKE HURON

1051 NOTAM FILE LAN

RWY 18-36: 2600X100 (TURF)

RWY 18: Thld dsplcd 440'. Trees.

RWY 36: Thld dsplcd 715'. Trees.

RWY 05-23: 2200X100 (TURF)

RWY 05: Thld dsplcd 200'. Trees.

RWY 23: Thld dsplcd 415'. Trees.

**AIRPORT REMARKS:** Unattended. Arpt CLOSED Nov 14-Apr 15 and when snow covered. Remote ctl model acft ops S end Rwy 05-23. Deer on and in/ovf arpt. Rwy 36 first 200' soft sand. Rwy 05-23 and Rwy 18-36 and dsplcd thlds marked with 3' yellow cones.

**COMMUNICATIONS:** CTAF 122.9

**MACKINAC CO** (See ST IGNACE)

NDB LDM  
341

APP CRS  
260°

Rwy Idg	<b>5003</b>
TDZE	<b>645</b>
Apt Elev	<b>645</b>

# NDB RWY 26

LUDINGTON/MASON COUNTY (LDM)

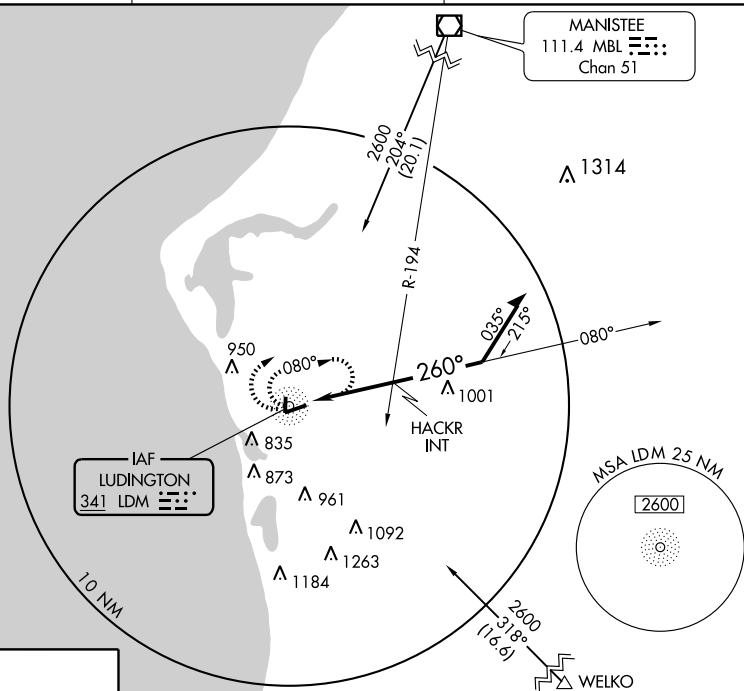


Obtain local altimeter setting on CTAF; when not received, use Muskegon altimeter setting and increase all MDAs 220 feet and all visibilities  $\frac{3}{4}$  of a mile.

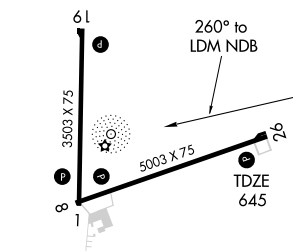
**MISSED APPROACH:** Climbing right turn to 2500 in LDM NDB holding pattern.

AWOS-3  
119.925

MINNEAPOLIS CENTER  
120.85 322.35

UNICOM  
123.0 (CTAF) **L**

ELEV 645

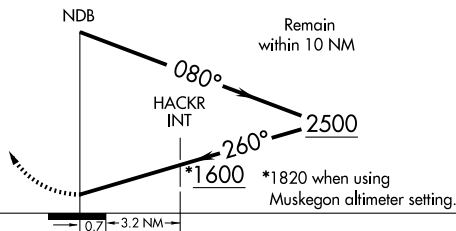
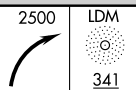


REIL Rwy 26 **L**  
MIRL Rwy 8-26 and 1-19 **L**

Knots	60	90	120	150	180
Min:Sec					

LUDINGTON, MICHIGAN

Orig-A 07018



CATEGORY	A	B	C	D
S-26	1600-1¼ 955 (1000-1¼)	1600-1½ 955 (1000-1½)	1600-3	955 (1000-3)
CIRCLING	1600-1¼ 955 (1000-1¼)	1600-1½ 955 (1000-1½)	1600-3	955 (1000-3)

## HACKR FIX MINIMUMS

S-26	1160-1 515 (600-1)	1160-1½ 515 (600-1½)	1160-1¾ 515 (600-1¾)
CIRCLING	1160-1 515 (600-1)	1200-1½ 555 (600-1½)	1300-2 655 (700-2)

LUDINGTON/MASON COUNTY (LDM)

NDB RWY 26

43°58'N - 86°24'W

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1. 23 SEP 2010 to 21 OCT 2010

APP CRS **074°**  
 Rwy Idg **5003**  
 TDZE **643**  
 Apt Elev **646**

# RNAV (GPS) RWY 8

LUDINGTON/MASON COUNTY (LDM)

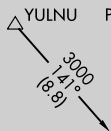
**T** DME/DME RNP -0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Muskegon County altimeter setting and increase all MDAs 120 feet, increase LNAV and circling visibility Cat C/D ½ mile.

**MISSED APPROACH:** Climb to 3000 direct CEYNA and via 152° track to WELKO and hold.

AWOS-3  
**119.925**

MINNEAPOLIS CENTER  
**120.85 322.35**

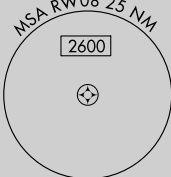
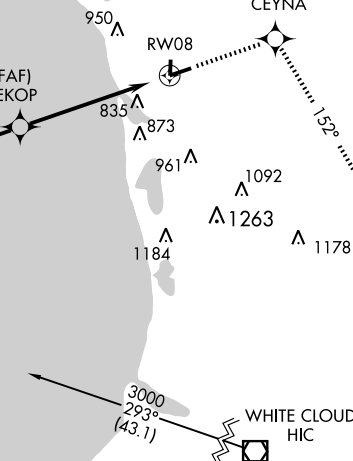
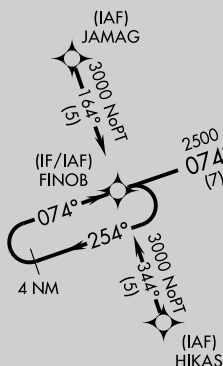
UNICOM  
**123.0 (CTAF)**



Procedure NA for arrivals at YULNU via V55 NW Bnd.



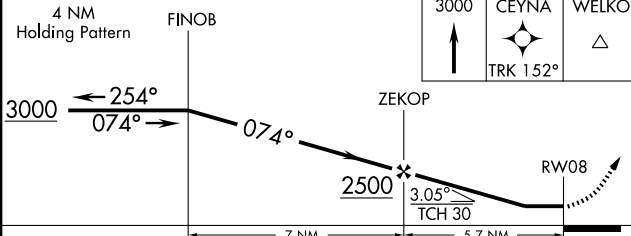
Procedure NA for arrivals at MBL VOR/DME via V271 N Bnd.



Procedure NA for arrivals on HIC VOR/DME airway radials 303 CW 332.

ELEV 646

4 NM Holding Pattern



CATEGORY	A	B	C	D
LNAV MDA	1140-1	497 (500-1)	1140-1¼ 497 (500-1¼)	1140-1½ 497 (500-1½)
CIRCLING	1160-1	514 (600-1)	1200-1½ 554 (600-1½)	1300-2 654 (700-2)

REIL Rwy 26 **1**  
 MIRL Rwy 8-26 and 1-19 **1**





**MACKINAC ISLAND** (MCD) 1 NW UTC-5(-4DT) N45°51.90' W84°38.24'

LAKE HURON

739 B TPA-1900 (1159) NOTAM FILE MCD

L-31B

RWY 08-26: H3500X75 (ASPH) S-13 MIRL 0.4% up NE

IAP

RWY 08: REIL. PAPI(P4L)—GA 3.0° TCH 25'. Trees.

RWY 26: REIL. PAPI(P4L)—GA 3.5° TCH 34'. Trees.

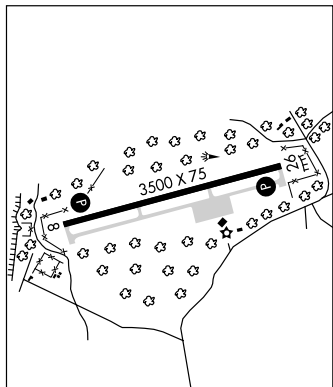
**AIRPORT REMARKS:** Attended 1300-2200Z+. Noise abatement procedures: Tfc pattern altitude 1900' MSL; climb to 1900' MSL before turning; avoid flight over shore and town; no touch and go lds. Birds on and in/ovf arpt. Flocks of seagulls in/ovf landfill 0.3 miles NE. Rwy 08-26 slopes up from E to W. Ldg fee. **ACTIVATE** MIRL Rwy 08-26 and PAPI Rwy 08 and 26 and REIL Rwy 08 and 26—122.8.

**WEATHER DATA SOURCES:** AWOS-3 118.275 (906) 847-3778.**COMMUNICATIONS:** CTAF/UNICOM 122.7

Ⓡ MINNEAPOLIS CENTER APP/DEP CON 134.6

**RADIO AIDS TO NAVIGATION:** NOTAM FILE PLN.

PELLSTON (L) VORTACW 111.8 PLN Chan 55 N45°37.84'

W84°39.85' 011° 14.1 NM to fld. 840/6W. **HIWAS.****COMM/NAV/WEATHER REMARKS:** AWOS-3 visibility unreliable.**MACKINAC ISLAND** N45°53.48' W84°44.09'

LAKE HURON

RCO 122.35 (GREEN BAY RADIO) at Mackinac Co.

L-31B

**MADDS** N42°29.69' W83°05.60' NOTAM FILE DET.

DETROIT

NDB (LOM) 338 DE 149° 6.3 NM to Coleman A. Young Muni. Unmonitored.

**MAIDENS** (See WILLIAMSTON)**MALLY** N42°07.61' W86°18.80' NOTAM FILE BEH.

CHICAGO

NDB (LOM) 397 BE 274° 5.1 NM to Southwest Michigan Rgnl. Unmonitored.

**MANCELONA MUNI** (D90) 2 N UTC-5(-4DT) N44°55.50' W85°04.00'

GREEN BAY

1133 NOTAM FILE LAN

RWY 18-36: 3400X140 (TURF)

RWY 18: Trees. RWY 36: Tree.

RWY 10-28: 2050X120 (TURF)

RWY 10: Thld dspcd 830'. Trees. RWY 28: Thld dspcd 200'. Tree.

**AIRPORT REMARKS:** Unattended. Arpt CLOSED when snow covered and Nov thru Apr 15 rwy not plowed. Rwy 18-36 marked with 3' yellow cones. Rwy 10-28 marked with tires.

**COMMUNICATIONS:** CTAF 122.9**MANCHESTER****ROSSETTIE** (75G) 3 N UTC-5(-4DT) N42°11.70' W84°01.85'

DETROIT

1005 NOTAM FILE LAN

COPTER

RWY 18-36: 2480X100 (TURF) LIRL (NSTD)

RWY 18: Trees. RWY 36: Thld dspcd 665'. Road. Rgt tfc.

**AIRPORT REMARKS:** Attended irregularly. Field gets muddy in spring. Rwy on rolling terrain. Rwy 18-36 NSTD LIRL due to spacing. Rwy 18-36 marked with 2' yellow cones and painted tires.

**COMMUNICATIONS:** CTAF 122.9**MANISTEE** N44°16.24' W86°15.24' NOTAM FILE MBL.

GREEN BAY

(L) VOR/DME 111.4 MBL Chan 51 at Manistee Co-Blacker. 618/5W. **AWOS-3.**

L-281, 31B

VOR unusable 140°-165° byd 20 NM below 5000'. DME unusable 320°-070° byd 20 NM below 3000'.

RCO 122.1R 111.4T (LANSING RADIO)



VORTAC PLN <b>111.8</b> Chan <b>55</b>	APP CRS <b>012°</b>	Rwy Idg TDZE Apt Elev <b>740</b>	N/A N/A <b>740</b>
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# VOR/DME or GPS-A

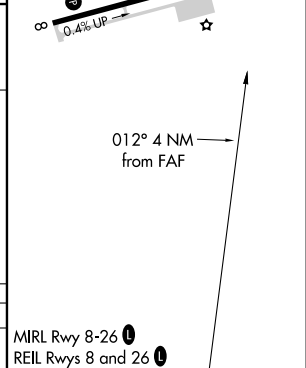
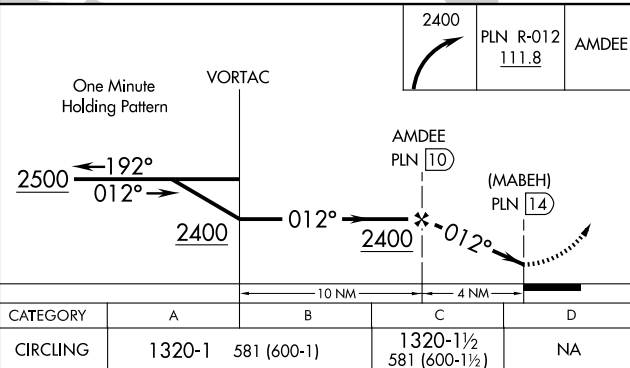
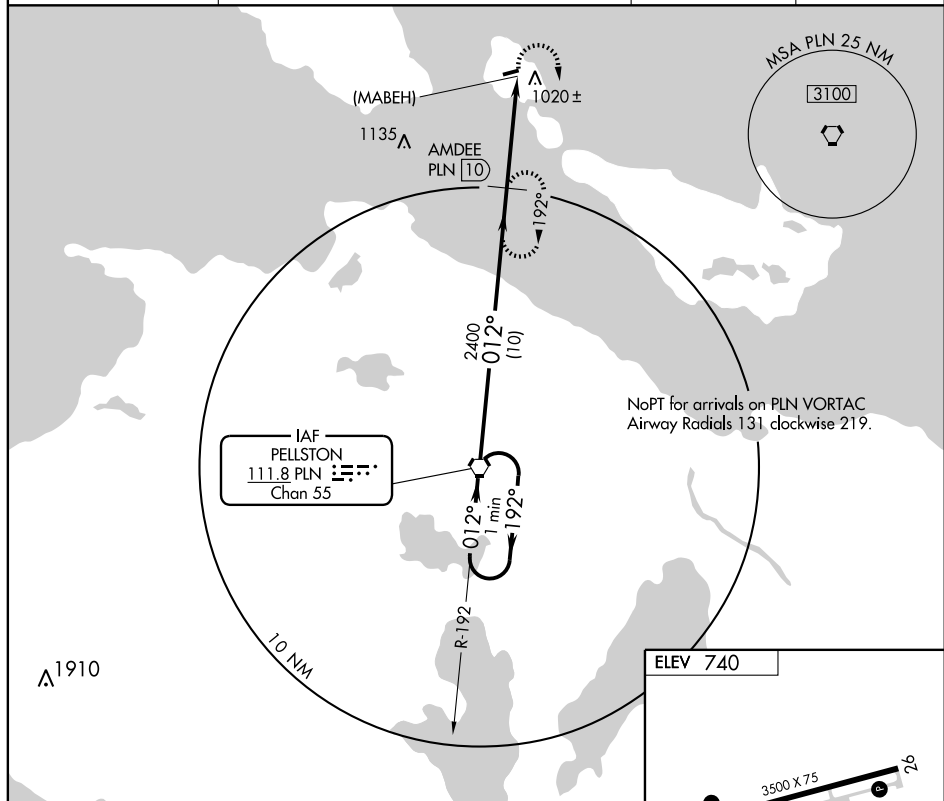
## MACKINAC ISLAND (MCD)

▼ Use Mackinac Island altimeter setting. If not available, use Pellston altimeter setting and increase all MDAs 80 feet; if neither are available, procedure not authorized.

▲ NA

MISSED APPROACH: Climbing right turn to 2400 via PLN R-012 to AMDEE 10 DME and hold.

AWOS-3 <b>118.275</b>	MINNEAPOLIS CENTER <b>134.6 354.05</b>	UNICOM <b>122.7</b> (CTAF)	<b>122.8</b>
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**MANISTEE CO—BLACKER** (MBL) 3 NE UTC-5(-4DT) N44°16.35' W86°14.81'

621 B S2 FUEL 100LL, JET A Class III, ARFF Index A NOTAM FILE MBL

GREEN BAY

H-2L, L-281, 31B

RWY 09-27: H5500X100 (ASPH) S-26, D-31 HIRL

IAP

RWY 09: REIL. PAPI(P4L)—GA 3.0° TCH 30'. Tree.

RWY 27: MALSR. PAPI(P4L)—GA 3.0° TCH 45'. Trees.

RWY 18-36: H2721X75 (ASPH) S-12.5 MIRL

RWY 18: PAPI(P2L)—GA 4.0° TCH 30'. Trees.

RWY 36: PAPI(P2L)—GA 4.0° TCH 26'. Tree.

**AIRPORT REMARKS:** Attended Apr-Oct 1300-0100Z† Nov-Mar 1300-2200Z†. Deer and birds on and in/ov arpt. ARFF unavbl exc air carrier, others 24 hr PPR 231-723-4351. ARFF monitoring CTAF during air carrier ops. Part 139 certified for scheduled air carriers 10-30 seats only. Unscheduled air carriers over 30 seats not authorized. Maintenance personnel monitoring CTAF during work on twys and rwys. Twys marked with reflectors. ACTIVATE HIRL Rwy 09-27 and MIRL Rwy 18-36, REIL Rwy 09, PAPI Rwys 09, 18, 27 and 36—CTAF.

**WEATHER DATA SOURCES:** AWOS-3 111.4 MBL (231) 723-6073.**COMMUNICATIONS:** CTAF/UNICOM 122.8

RCO 122.1R 111.4T (LANSING RADIO)

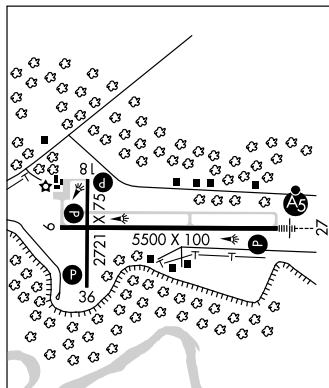
**RADIO AIDS TO NAVIGATION:** NOTAM FILE MBL.

(L) VOR/DME 111.4 MBL Chan 51 N44°16.24'

W86°15.24' at fld. 618/5W. AWOS-3.

JEPOT NDB (LOM) 254 MB N44°16.25' W86°08.57' 276° 4.5NM to fld.

ILS 108.35 I-MBL Rwy 27. LOM JEPOT NDB. Unmonitored 0100-1300Z†.

**MANISTIQUE****SCHOOLCRAFT CO** (ISQ) 3 NE UTC-5(-4DT) N45°58.48' W86°10.31'

684 B FUEL 100LL, JET A NOTAM FILE ISQ

GREEN BAY

H-2L, L-31B

RWY 10-28: H5001X100 (ASPH) S-26 D-45 MIRL

IAP

RWY 10: PAPI(P2L)—GA 3.0° TCH 35'. Trees.

RWY 28: REIL. PAPI(P2L)—GA 3.0° TCH 38'. Trees.

RWY 01-19: H2501X50 (ASPH) S-26, D-45

RWY 01: Trees. RWY 19: Trees.

**AIRPORT REMARKS:** Attended Mon-Fri 1200-2200Z†, Sat-Sun 1330-2300Z†. For arpt attendance call 906-341-5522 during attendance hrs; or 906-341-0515 after hours (manager residence). Birds and deer on and in/ov arpt. Rwy 19 100' unmarked p-line 1 mile north of rwy end. Ramp and twy pavement cracked with grass growing in cracks. Rwy 10 PAPI OTS indef. ACTIVATE MIRL Rwy 10-28 and PAPI Rwy 10 and Rwy 28 and REIL Rwy 28—CTAF. Rwy 28 south side REIL OTS indef.

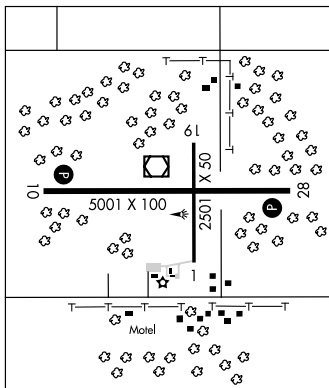
**WEATHER DATA SOURCES:** AWOS-3 110.4 ISQ (906) 341-8585.**COMMUNICATIONS:** CTAF/UNICOM 122.8

RCO 122.25 (GREEN BAY RADIO)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE ISQ.

(L) VOR/DME 110.4 ISQ Chan 41 N45°58.58'

W86°10.41' at fld. 680/5W. AWOS-3.

**MAPLE GROVE** (See FOWLerville)**MARE GROVE HELIPORT** (See FOWLerville)

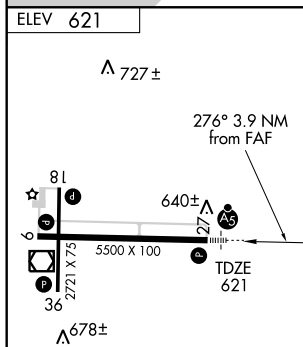
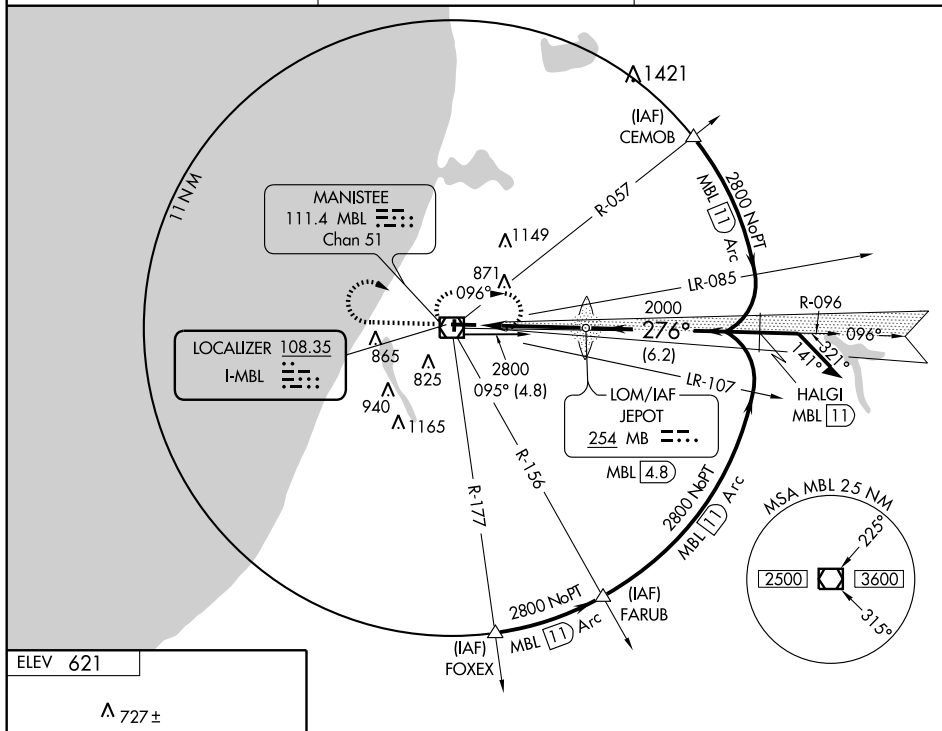
LOC I-MBL <b>108.35</b>	APP CRS <b>276°</b>	Rwy Idg TDZE Apt Elev	<b>5500</b> <b>621</b> <b>621</b>
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# ILS or LOC RWY 27

## MANISTEE COUNTY-BLACKER (MBL)

<b>A</b>	MALSR 	MISSED APPROACH: Climb to 1500 then climbing right turn to 2800 direct MBL VOR/DME and hold.
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AWOS-3 <b>111.4</b>	LANSING RADIO <b>122.1R</b>	UNICOM <b>122.8 (CTAF) 0</b>
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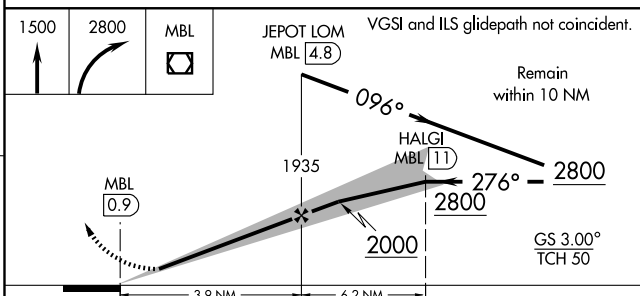


HIRL Rwy 9-27 0  
MIRL Rwy 18-36 0  
REIL Rwy 9 0

FAF to MAP 3.9 NM					
Knots	60	90	120	150	180
Min:Sec	3:54	2:36	1:57	1:34	1:18

MANISTEE, MICHIGAN

Orig-B 26AUG10



CATEGORY	A	B	C	D
S-ILS 27	821-½ 200 (200-½)			
S-LOC 27	1080-½ 459 (500-½)		1080-¾ 459 (500-¾)	1080-1 459 (500-1)
CIRCLING	1120-1 499 (500-1)	1160-1 539 (600-1)	1180-1½ 559 (600-1½)	1300-2¼ 679 (700-2¼)

MANISTEE COUNTY-BLACKER (MBL)

ILS or LOC RWY 27

44°16'N - 86°15'W

VOR/DME MBL <b>111.4</b> Chan <b>51</b>	APP CRS <b>110°</b>	Rwy Idg TDZE Apt Elev <b>5500</b> <b>621</b> <b>621</b>
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**VOR RWY 9**

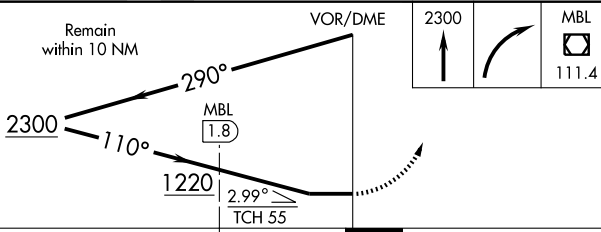
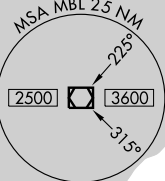
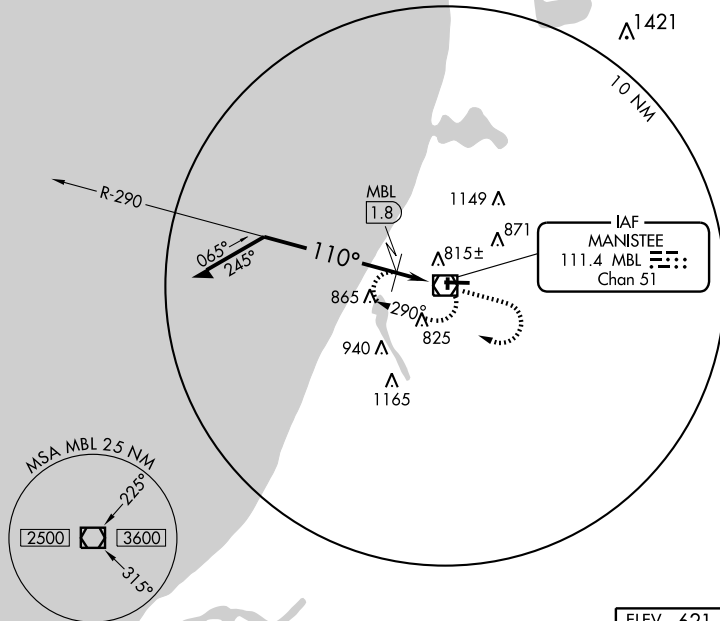
MANISTEE COUNTY-BLACKER (MBL)

MISSED APPROACH: Climb to 2300, then  
right turn direct MBL VOR/DME and hold.

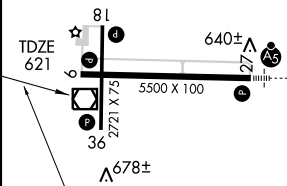
AWOS-3  
**111.4**

LANSING RADIO  
**122.1R**

UNICOM  
**122.8** (CTAF) **1**



ELEV **621**  $\Delta$  727±



CATEGORY	A	B	C	D
S-9	1220-1	599 (600-1)	1220-1½ 599 (600-1½)	1220-1¾ 599 (600-1¾)
CIRCLING	1220-1	599 (600-1)	1220-1½ 599 (600-1½)	1300-2¼ 679 (700-2¼)
DME MINIMUMS				
S-9	1080-1	459 (500-1)	1080-1¼ 459 (500-1¼)	1080-1½ 459 (500-1½)
CIRCLING	1120-1 499 (500-1)	1160-1 539 (600-1)	1180-1½ 559 (600-1½)	1300-2¼ 679 (700-2¼)

HIRL Rwy 9-27 **1**  
MIRL Rwy 18-36 **1**  
REIL Rwy 9 **1**

VOR/DME MBL <b>111.4</b> Chan <b>51</b>	APP CRS <b>271°</b>	Rwy Idg <b>5500</b> TDZE <b>621</b> Apt Elev <b>621</b>
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VOR RWY 27  
MANISTEE COUNTY-BLACKER (MBL)

MALSR

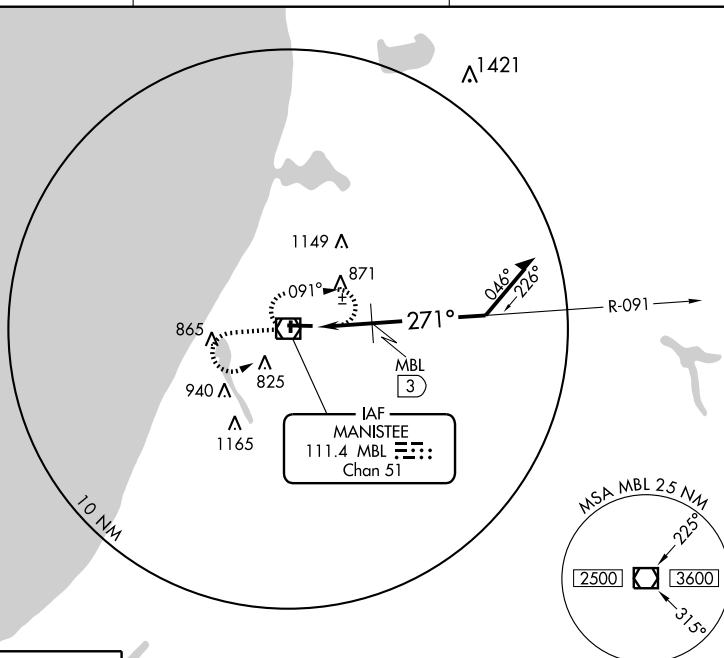


**MISSED APPROACH:** Climb to 2300, then left turn direct MBL VOR/DME and hold.

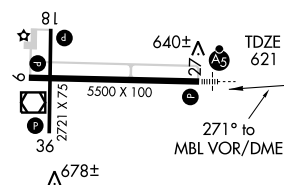
AWOS-3  
111.4

LANSING RADIO  
**122.1 R**

UNICOM  
122.8 (CTAF) **L**



ELEV 621

 $\Delta 727 \pm$ 

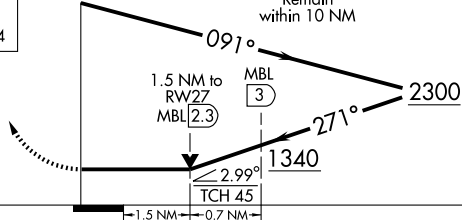
2300



MBI

VOR/DME

Remain  
within 10 NM



CATEGORY	A	B	C	D
S-27	1340-½ 719 (800-½)		1340-1½ 719 (800-1½)	1340-1¾ 719 (800-1¾)
CIRCLING	1340-1 719 (800-1)		1340-2 719 (800-2)	1340-2¼ 719 (800-2¼)
DME MINIMUMS				
S-27	1140-½ 519 (600-½)		1140-1 519 (600-1)	1140-1¼ 519 (600-1¼)
CIRCLING	1140-1 519 (600-1)	1160-1 539 (600-1)	1180-1½ 559 (600-1½)	1300-2¼ 679 (700-2¼)

MANISTEE, MICHIGAN

Orig-A 08269

MANISTEE COUNTY-BLACKER (MBL)

VOR RWY 27

44°16'N - 86°15'W

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1. 23 SEP 2010 to 21 OCT 2010



**MANISTEE CO—BLACKER** (MBL) 3 NE UTC-5(-4DT) N44°16.35' W86°14.81'

621 B S2 FUEL 100LL, JET A Class III, ARFF Index A NOTAM FILE MBL

GREEN BAY

H-2L, L-281, 31B

RWY 09-27: H5500X100 (ASPH) S-26, D-31 HIRL

IAP

RWY 09: REIL. PAPI(P4L)—GA 3.0° TCH 30'. Tree.

RWY 27: MALSR. PAPI(P4L)—GA 3.0° TCH 45'. Trees.

RWY 18-36: H2721X75 (ASPH) S-12.5 MIRL

RWY 18: PAPI(P2L)—GA 4.0° TCH 30'. Trees.

RWY 36: PAPI(P2L)—GA 4.0° TCH 26'. Tree.

**AIRPORT REMARKS:** Attended Apr-Oct 1300-0100Z† Nov-Mar 1300-2200Z†. Deer and birds on and in/ov arpt. ARFF unavbl exc air carrier, others 24 hr PPR 231-723-4351. ARFF monitoring CTAF during air carrier ops. Part 139 certified for scheduled air carriers 10-30 seats only. Unscheduled air carriers over 30 seats not authorized. Maintenance personnel monitoring CTAF during work on twys and rwys. Twys marked with reflectors. ACTIVATE HIRL Rwy 09-27 and MIRL Rwy 18-36, REIL Rwy 09, PAPI Rwys 09, 18, 27 and 36—CTAF.

**WEATHER DATA SOURCES:** AWOS-3 111.4 MBL (231) 723-6073.**COMMUNICATIONS:** CTAF/UNICOM 122.8

RCO 122.1R 111.4T (LANSING RADIO)

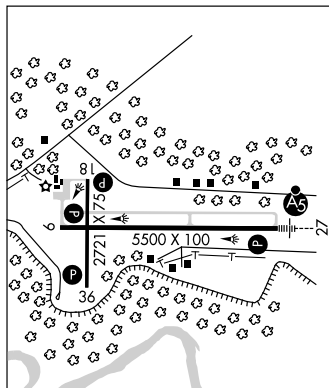
**RADIO AIDS TO NAVIGATION:** NOTAM FILE MBL.

(L) VOR/DME 111.4 MBL Chan 51 N44°16.24'

W86°15.24' at fld. 618/5W. AWOS-3.

JEPOT NDB (LOM) 254 MB N44°16.25' W86°08.57' 276° 4.5NM to fld.

ILS 108.35 I-MBL Rwy 27. LOM JEPOT NDB. Unmonitored 0100-1300Z†.

**MANISTIQUE****SCHOOLCRAFT CO** (ISQ) 3 NE UTC-5(-4DT) N45°58.48' W86°10.31'

684 B FUEL 100LL, JET A NOTAM FILE ISQ

GREEN BAY

H-2L, L-31B

RWY 10-28: H5001X100 (ASPH) S-26 D-45 MIRL

IAP

RWY 10: PAPI(P2L)—GA 3.0° TCH 35'. Trees.

RWY 28: REIL. PAPI(P2L)—GA 3.0° TCH 38'. Trees.

RWY 01-19: H2501X50 (ASPH) S-26, D-45

RWY 01: Trees. RWY 19: Trees.

**AIRPORT REMARKS:** Attended Mon-Fri 1200-2200Z†, Sat-Sun 1330-2300Z†. For arpt attendance call 906-341-5522 during attendance hrs; or 906-341-0515 after hours (manager residence). Birds and deer on and in/ov arpt. Rwy 19 100' unmarked p-line 1 mile north of rwy end. Ramp and twy pavement cracked with grass growing in cracks. Rwy 10 PAPI OTS indef. ACTIVATE MIRL Rwy 10-28 and PAPI Rwy 10 and Rwy 28 and REIL Rwy 28—CTAF. Rwy 28 south side REIL OTS indef.

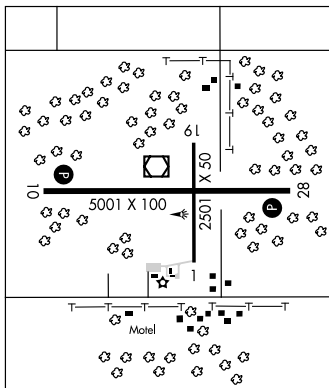
**WEATHER DATA SOURCES:** AWOS-3 110.4 ISQ (906) 341-8585.**COMMUNICATIONS:** CTAF/UNICOM 122.8

RCO 122.25 (GREEN BAY RADIO)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE ISQ.

(L) VOR/DME 110.4 ISQ Chan 41 N45°58.58'

W86°10.41' at fld. 680/5W. AWOS-3.

**MAPLE GROVE** (See FOWLerville)**MARE GROVE HELIPORT** (See FOWLerville)

VOR/DME ISQ  
**110.4**  
Chan **41**

APP CRS  
**280°**

Rwy Idg  
TDZE  
Apt Elev

**5001**  
**684**  
**685**

# VOR or GPS RWY 28

MANISTIQUE/ SCHOOLCRAFT COUNTY (ISQ)

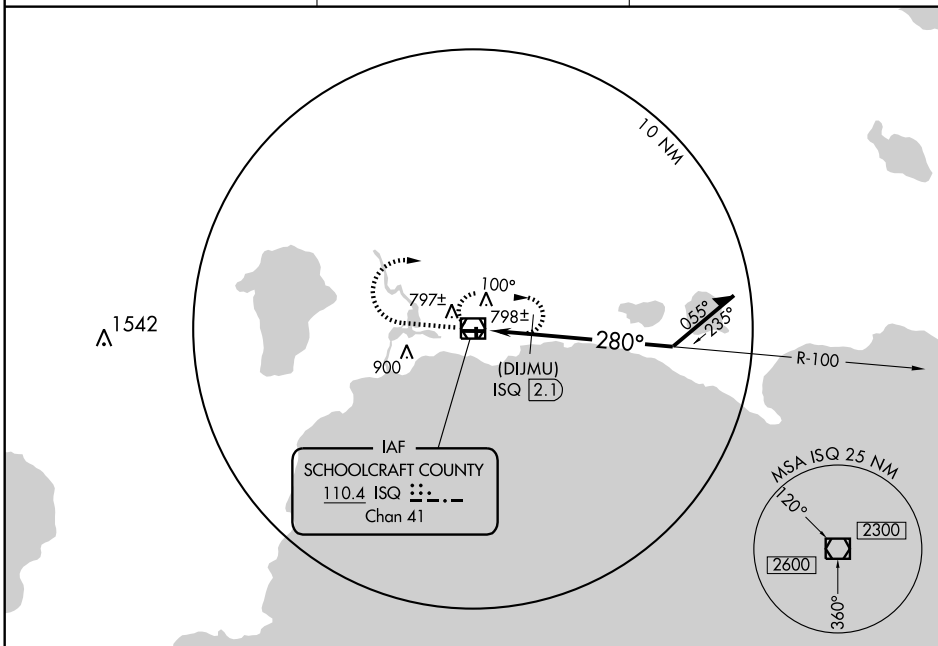
**NA** Obtain local altimeter setting on CTAF, when not received, use Escanaba altimeter setting and increase all MDA's 100 feet, and visibility Cats. C and D ¼ mile.

MISSED APPROACH: Climb to 2300, then right turn direct ISQ VOR/DME and hold.

AWOS-3  
**110.4**

GREEN BAY RADIO  
**122.25**

UNICOM  
**122.8** (CTAF) **0**

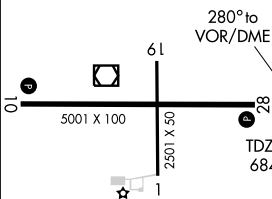


ELEV **685**

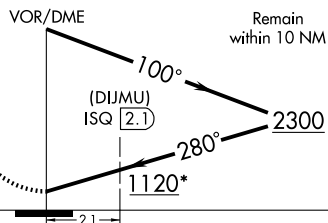
2300



ISQ  
**110.4**



\*1220 when using Escanaba altimeter setting.



REIL Rwy 28 **0**  
MIRL Rwy 10-28 **0**

MANISTIQUE, MICHIGAN  
Orig-A 09127

MANISTIQUE/ SCHOOLCRAFT COUNTY (ISQ)

45°58'N - 86°10'W

# VOR or GPS RWY 28

**MARINE CITY** (76G) 4 W UTC-5(-4DT) N42°43.25' W82°35.75'DETROIT  
L-30F

613 B S4 FUEL 100LL JET A TPA-1413(800) NOTAM FILE LAN

RWY 04-22: H3100X60 (ASPH) MIRL (NSTD)

RWY 04: REIL. PAPI(P2L)—GA 4.0° TCH 25'. P-line.

RWY 22: PAPI(P2L)—GA 4.0° TCH 25'. Thld dsplcd 295'. Brush.

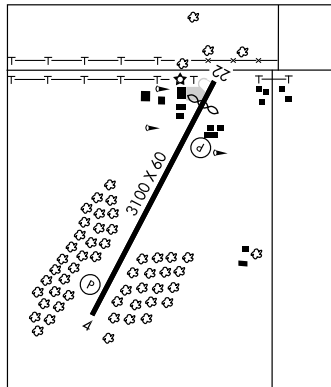
AIRPORT REMARKS: Attended continuously. Rwy 04-22 NSTD MIRL lctd 23' from rwy edge.

COMMUNICATIONS: CTAF/UNICOM 123.0

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

PECK (H) VORTAC 114.0 ECK Chan 87 N43°15.36'

W82°43.08' 177° 32.5 NM to fld. 810/7W. HIWAS.

**MARLETTE** (77G) 1 SW UTC-5(-4DT) N43°18.71' W83°05.46'DETROIT  
L-28J  
IAP

895 B S4 FUEL 100LL NOTAM FILE LAN

RWY 09-27: H3796X75 (ASPH) MIRL (NSTD)

RWY 09: PAPI(P4R)—GA 3.0° TCH 20'. Trees.

RWY 27: REIL. PAPI(P4R)—GA 3.0° TCH 20'. Trees.

RWY 01-19: H3497X75 (ASPH) MIRL 0.7% up N

RWY 01: PAPI(P4L)—GA 3.0° TCH 20'.

RWY 19: PAPI(P4L)—GA 3.0° TCH 20'. Trees.

AIRPORT REMARKS: Attended Mon-Fri 1300-2200Z $\pm$ . Glider ops on and in vol arpt. Rwy 09-27 NSTD MIRL; lgts last 2000' not split amber/white lens. ACTIVATE MIRL Rwy 01-19 and Rwy 09-27; PAPI and REIL Rwy 27—CTAF.

COMMUNICATIONS: CTAF/UNICOM 122.8

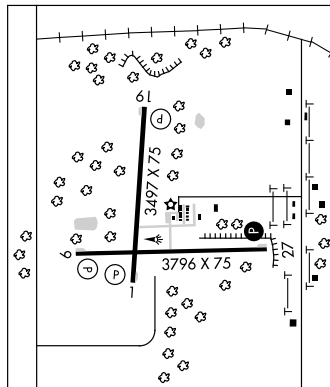
PECK RCO 122.1R 114.0T (LANSING RADIO)

® CLEVELAND CENTER APP/DEP CON 127.7

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

PECK (H) VORTAC 114.0 ECK Chan 87 N43°15.35'

W82°43.08' 289° 16.7 NM to fld. 810/7W. HIWAS.



APP CRS	Rwy Idg	<b>3796</b>
<b>094°</b>	TDZE	<b>881</b>
	Apt Elev	<b>895</b>

# RNAV (GPS) RWY 9

MARLETTE (77G)

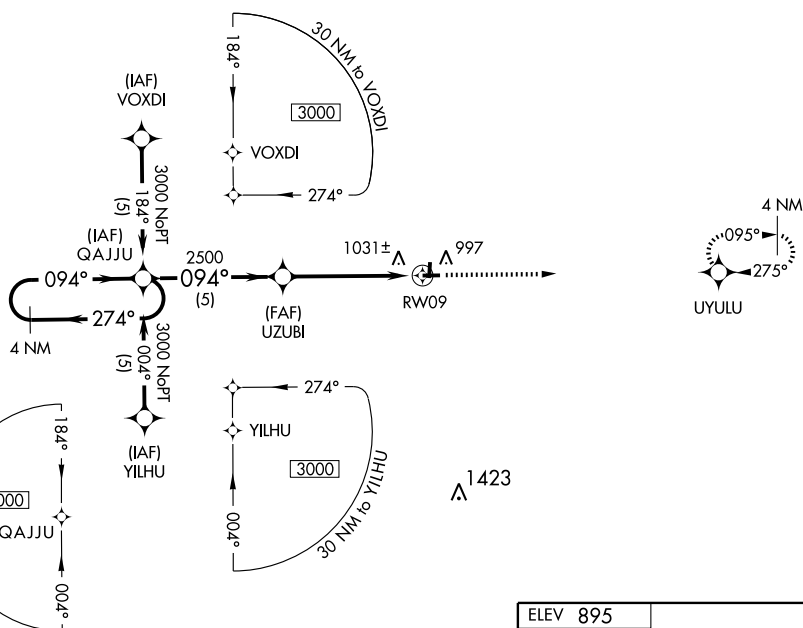


Use Flint altimeter setting.  
DME/DME RNP-0.3 NA.

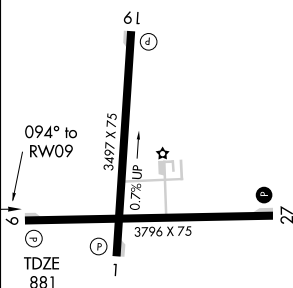
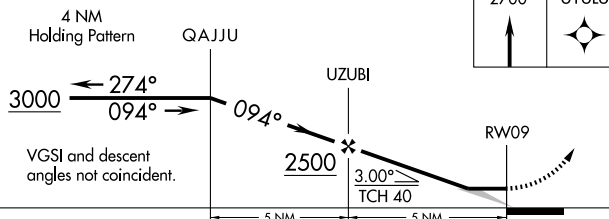
MISSED APPROACH: Climb to  
2700 direct UYULU WP and hold.

CLEVELAND CENTER  
**127.7 307.8**

UNICOM  
**122.8 (CTAF) 0**



ELEV 895



CATEGORY	A	B	C	D
GLS PA DA	NA			
LNAV/VNAV DA	NA			
LNAV MDA	1440-1 559 (600-1)	1440-1½ 559 (600-1½)	1440-1¾ 559 (600-1¾)	
CIRCLING	1480-1 585 (600-1)	1480-1½ 585 (600-1½)	1480-2 585 (600-2)	

APP CRS **275°**  
 Rwy ldg **3796**  
 TDZE **881**  
 Apt Elev **895**

# RNAV (GPS) RWY 27

MARLETTE (77G)

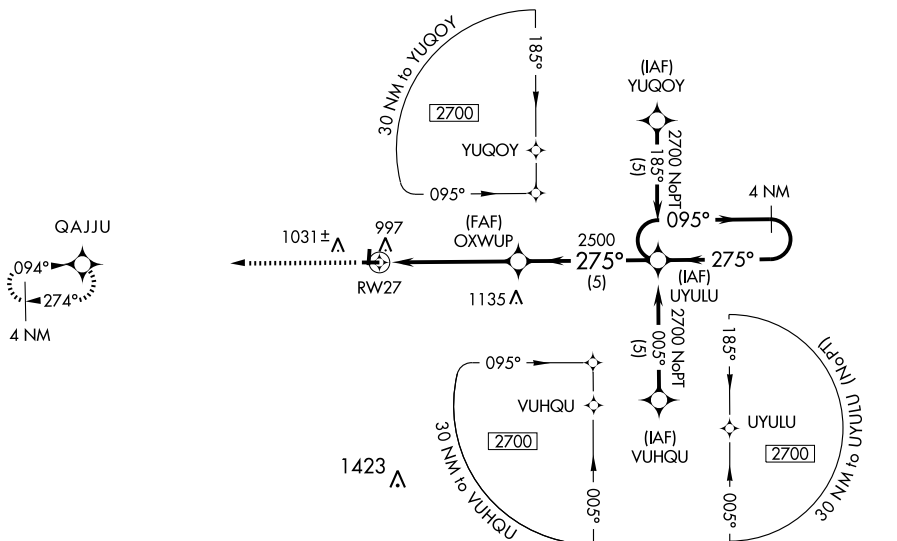


Use Flint altimeter setting.  
 DME/DME RNP-0.3 NA.

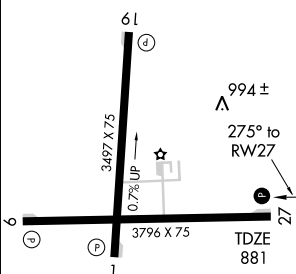
MISSED APPROACH: Climb to  
 3000 direct QAJJU WP and hold.

CLEVELAND CENTER  
**127.7 307.8**

UNICOM  
**122.8 (CTAF) 0**



ELEV **895**



REIL Rwy 27 **0**  
 MRL Rwy 1-19 and 9-27 **0**

3000		QAJJU		4 NM Holding Pattern			
RW27		OXWUP		UYULU			
275°		275°		2700			
3.00° TCH 40		2500		VGSI and descent angles not coincident.			
5 NM		5 NM					
CATEGORY	A		B		D		
GLS PA DA	NA						
INAV/VNAV DA	NA						
INAV MDA	1440-1 559 (600-1)		1440-1½ 559 (600-1½)		1440-1¾ 559 (600-1¾)		
CIRCLING	1480-1 585 (600-1)		1480-1½ 585 (600-1½)		1480-2 585 (600-2)		

MARLETTE, MICHIGAN

Orig-B 03JUN10

43°19'N - 83°05'W

MARLETTE (77G)  
**RNAV (GPS) RWY 27**

VORTAC ECK <b>114.0</b> Chan <b>87</b>	APP CRS <b>289°</b>	Rwy Idg TDZE Apt Elev	N/A N/A <b>895</b>
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# VOR/DME or GPS-A

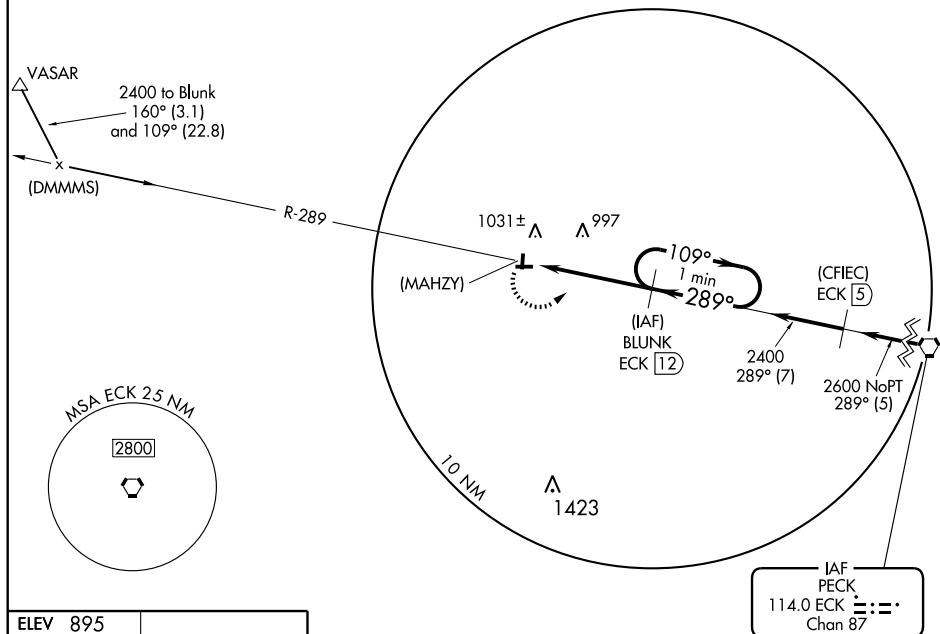
MARLETTE (77G)

**NA** Use Flint altimeter setting.

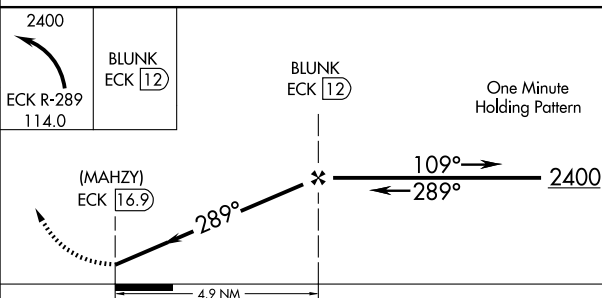
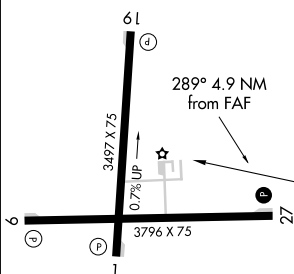
MISSED APPROACH: Climbing left turn to 2400  
via ECK R-289 to BLUNK 12 DME and hold.

CLEVELAND CENTER  
**127.7 307.8**

UNICOM  
**122.8** (CTAF) **0**



ELEV 895



CATEGORY	A	B	C	D
CIRCLING	1500-1	605 (700-1)	1500-1 3/4 605 (700-1 3/4)	1500-2 605 (700-2)

MARLETTE, MICHIGAN

Amdt 5A 09127

43°19'N - 83°05'W

MARLETTE (77G)  
**VOR/DME or GPS-A**

EC-1, 23 SEP 2010 to 21 OCT 2010

## AIRPORT DIAGRAM

AL-773 (FAA)

MARQUETTE/ SAWYER INTL (SAW)  
MARQUETTE, MICHIGAN

AWOS-3

118.375

SAWYER TOWER ★

119.975

GND CON

121.65

D

87°24'W

87°23'W

FIELD  
ELEV  
1221

61

193.7°

0.4% DOWN

12366 X 150

CONTROL  
TOWER

FIRE STATION

PASSENGER  
TERMINAL

RWY 01-19

S-75, D-175, 2S-175, 2D-490

ELEV  
1179

013.7°

GENERAL  
AVIATION  
TERMINAL

46°20'N

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.  
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

## AIRPORT DIAGRAM

MARQUETTE, MICHIGAN  
MARQUETTE/ SAWYER INTL (SAW)

## MARQUETTE

## SAWYER INTL

(SAW) 17 S UTC-5(-4DT) N46°21.22' W87°23.72'

GREEN BAY

1221 B S4 FUEL 100LL, JET A OX 1,2 LRA ARFF Index—See Remarks  
 RWY 01-19: H12366X150 (ASPH-CONC-GRVD) S-75, D-175, 2S-175, 2D-490

NOTAM FILE SAW  
 HIRL

H-2K, L-31A  
 IAP, AD

RWY 01: MALSR. PAPI(P4L)—GA 3.0° TCH 66'.

RWY 19: REIL. PAPI(P4L)—GA 3.0° TCH 62'. 0.4% down.

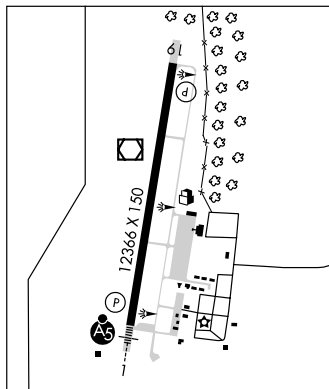
## RUNWAY DECLARED DISTANCE INFORMATION

RWY 01: TORA-12366 TODA-12366 ASDA-12366 LDA-12366

RWY 19: TORA-12366 TODA-12366 ASDA-12366 LDA-12366

## AIRPORT REMARKS: Attended 1000-0100Z±. For svc after hrs call

906-222-3062 (pager). Fuel avbl 24 hrs with credit card, multi-svc and av card. Self svc fuel located adjacent FBO ramp. FBO svc after hrs contact 906-222-3062. Birds and deer on and in/ov arpt. PAEW on arpt monitor 119.975 (CTAF). Class I, ARFF Index D avbl. Call arpt mgr at 906-458-6336 to confirm availability of personnel and equipment. Air carrier ops involving acft with more than 30 passenger seats are not authorized in excess of 15 minutes before or after scheduled arrival/dep times without prior coordination with arpt manager. 48 hrs prior to unscheduled air carrier operations with more than 30 passenger seats call arpt manager 906-458-6336. General aviation and charter acft parking avbl at general aviation terminal only, lctd SE corner of arpt. North entrance to air carrier ramp, south of ARFF/SRE building, closed Nov-Mar. S half of air carrier terminal ramp not plowed Oct-Apr. Frequent snow removal ops in progress various times Oct-Apr. Monitor CTAF. Twy A north of Twy C clsd 15 Nov-15 Apr. Twy B clsd 15 Nov-15 Apr. Twy G clsd 15 Nov-15 Apr. North air carrier ramp entrance/exit clsd 15 Nov-15 Apr. ACTIVATE HIRL Rwy 01-19, MALSR Rwy 01 and REIL Rwy 19—119.975. All lighting pilot controlled CTAF 119.975 when ATCT closed. Rwy 01-19 75' paved shoulders each side. Ramp fees in effect. Ramp fees may be waived with fuel purchase. FBO svc after hrs ctc 906-222-3062 (pager).



WEATHER DATA SOURCES: AWOS-3 118.375 (906) 346-5126.

COMMUNICATIONS: CTAF 119.975 UNICOM 122.7

SAWYER RCO 123.6 (GREEN BAY RADIO)

R MINNEAPOLIS CENTER APP/DEP CON 119.1

SAWYER TOWER 119.975 (1100-0300Z±) GND CON 121.65

AIRSPACE: CLASS D svc 1100-0300Z± other times CLASS E.

RADIO AIDS TO NAVIGATION: NOTAM FILE SAW.

(H) VOR/DME 117.1 SAW Chan 118 N46°21.54' W87°23.85' at fld. 1196/4W.

VOR portion unusable 330°-090° byd 10 NM blo 8000'. DME unusable 250°-090° byd 30 NM blo 4500'.

SUOMI NDB (LOM) 410 SO N46°15.71' W87°24.97' 013° 5.6NM to fld.

ILS 110.1 I-SOU Rwy 01. Class IE. LOM SUOMI NDB. ILS unmonitored.

COMM/NAV/WEATHER REMARKS: No emergency frequencies at twr.



LOC I-SOU <b>110.1</b>	APP CRS <b>013°</b>	Rwy Idg <b>12366</b> TDZE <b>1180</b> Apt Elev <b>1221</b>
---------------------------	------------------------	--

# ILS or LOC RWY 1

MARQUETTE/ SAWYER INTL (SAW)

**▼** Autopilot coupled approach NA below 1360 MSL. When local altimeter setting not received, use Ford altimeter setting and increase all DA 107 feet and all MDA 120 feet, increase S-LOC 1 and Circling Cat C and D visibility ¼ mile.

**▲** For inoperative MASLR when using Ford altimeter setting, increase S-ILS 1 visibility all Cats to 1. For inoperative MASLR increase S-LOC 1 CAT D visibility to 1.



**MISSED APPROACH:** Climb to 1600, then climbing right turn to 3000 via heading 101° and SAW R-095 to YEXJO Int and hold.

AWOS-3  
**118.375**

MINNEAPOLIS CENTER  
**119.1 290.2**

SAWYER TOWER ★  
**119.975 (CTAF) 0**

GND CON  
**121.65**

UNICOM  
**122.7**

LOCALIZER **110.1**

I-SOU

1762

SAWYER

**117.1 SAW**

Chan 118

3000

192° (5.9)

LOM/IAF

SUOMI

410 SO

SAW **5.9**

10 NM

R-095

275°

YEXJO

SAW **5.4**

1468

1601

R-349

013°

148°

328°

2700

013°

(11.6)

193°

R-063

SAW

R-193

3100 NoPT

063°

(31.3)

3000 NoPT

32°

(26)

3000 NoPT

32°

(26)

3000 NoPT

32°

(26)

3000 NoPT

32°

(26)

3000 NoPT

32°

(26)

3000 NoPT

32°

(26)

3000 NoPT

32°

(26)

3000 NoPT

32°

(26)

3000 NoPT

32°

(26)

IAF

IRON MOUNTAIN

111.2 IMT

Chan 49

3100 NoPT

063°

(31.3)

3000 NoPT

32°

(26)

3000 NoPT

32°

(26)

3000 NoPT

32°

(26)

3000 NoPT

32°

(26)

3000 NoPT

32°

(26)

3000 NoPT

32°

(26)

3000 NoPT

32°

(26)

Remain within 10 NM

193°

013°

3000

2698

GS 3.00°

TCH 51

2700

VGSI and ILS glidepath not coincident.

4.6 NM

1600

3000

hdg 101°

SAW R-095

YEXJO

1180

013° 4.6 NM from FAF

FAF to MAP 4.6 NM

CATEGORY	A	B	C	D
S-ILS 1	1380-½ 200 (200-½)			
S-LOC 1	1520-½ 340 (300-½)			1520-¾ 340 (300-¾)
CIRCLING	1720-1 499 (500-1)	1720-1½ 499 (500-1½)	1780-2 559 (600-2)	

ELEV **1221**

HIRL Rwy 1-19

REIL Rwy 19

0.4% DOWN

12366 X 150

TDZE 1180

013° 4.6 NM from FAF

FAF to MAP 4.6 NM

Knots 60 90 120 150 180

Min:Sec 4:36 3:04 2:18 1:50 1:32

LOM SO APP CRS Rwy Idg **12366**  
**410** **013°** TDZE **1180**  
 Apt Elev **1221**

**NDB RWY 1**

MARQUETTE/ SAWYER INTL (SAW)

**T** For inoperative MALSR, increase S-1 CAT C visibility to 1.  
**A** NA When local altimeter setting not received, use Ford altimeter setting and increase all MDA 120 feet, increase S-1 Cat C visibility ¼ mile and Cat D ½ mile.

MALSR



**MISSED APPROACH:** Climb to 1800, then climbing right turn to 3000 direct SUOMI LOM and hold.

AWOS-3  
**118.375**

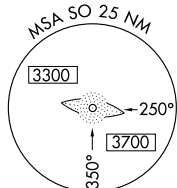
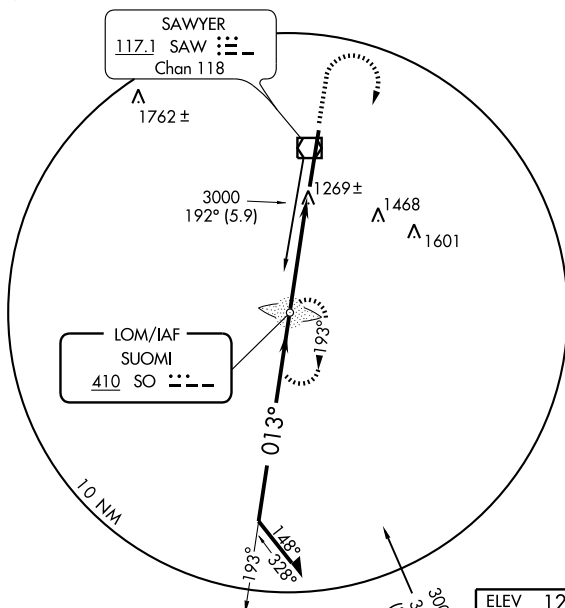
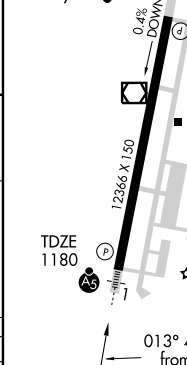
MINNEAPOLIS CENTER  
**119.1 290.2**

SAWYER TOWER ★  
**119.975 (CTAF) 0**

GND CON  
**121.65**

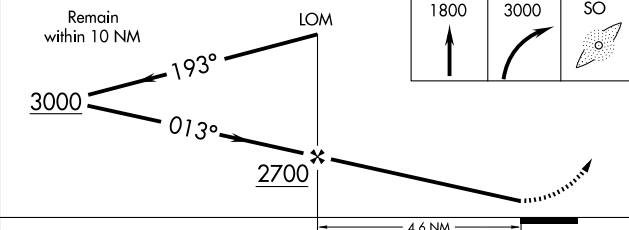
UNICOM  
**122.7**

2049  
 ▲

ELEV 1221 **D**HIRL Rwy 1-19 **0**REIL Rwy 19 **0**

FAF to MAP 4.6 NM

Knots	60	90	120	150	180
Min:Sec	4:36	3:04	2:18	1:50	1:32



CATEGORY	A	B	C	D
S-1	1580-¾ 400 (400-¾)			1580-1 400 (400-1)
CIRCLING	1720-1 499 (500-1)	1720-1½ 499 (500-1½)	1780-2 559 (600-2)	

MARQUETTE, MICHIGAN

Orig-A 03JUN10

46°21'N - 87°24'W

MARQUETTE/ SAWYER INTL (SAW)

**NDB RWY 1**



VOR/DME SAW  
**117.1**  
Chan **118**

APP CRS  
**009°**

Rwy ldg  
TDZE **1180**  
Apt Elev **1221**

**VOR RWY 1**

MARQUETTE/ SAWYER INTL (SAW)



MALSR



MISSED APPROACH: Climb to 1800, then climbing right turn to 3000 via heading 101° and SAW R-095 to YEXJO Int and hold.

AWOS-3  
**118.375**

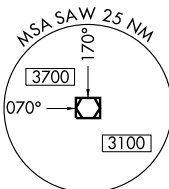
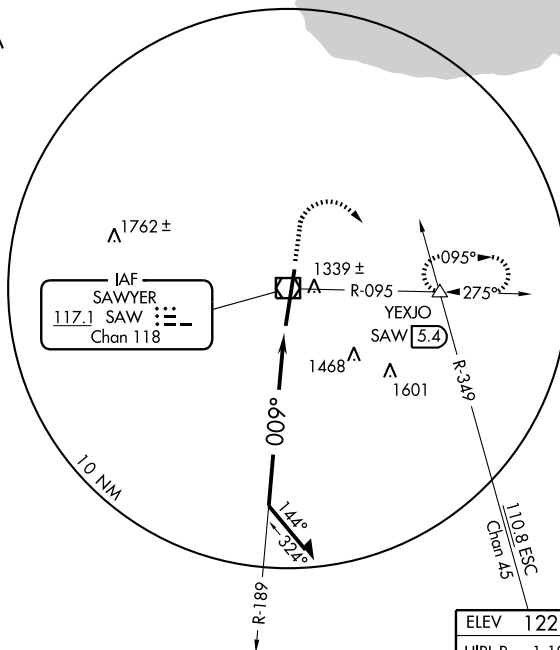
MINNEAPOLIS CENTER  
**119.1 290.2**

SAWYER TOWER ★  
**119.975 (CTAF) 0**

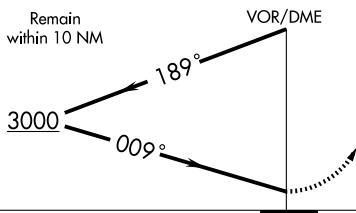
GND CON  
**121.65**

UNICOM  
**122.7**

2115±Λ



Remain  
within 10 NM



1800

3000

YEXJO  
△

HDG 101°  
SAW R-095  
117.1

ELEV 1221

D

HIRL Rwy 1-19

REIL Rwy 19

61

0.4% DOWN

12366 X 150

TDZE 1180

AS

★

009° to SAW VOR/DME

CATEGORY	A	B	C	D
S-1	1640-½	460 (500-½)	1640-¾ 460 (500-¾)	1640-1 460 (500-1)
CIRCLING	1720-1	499 (500-1)	1720-1½ 499 (500-1½)	1780-2 559 (600-2)

VOR/DME SAW  
**117.1**  
 Chan **118**

APP CRS  
**202°**

Rwy ldg  
 TDZE **12366**  
 Apt Elev **1221**

# VOR RWY 19

MARQUETTE/ SAWYER INTL (SAW)



MISSED APPROACH: Climb to 1800, then climbing left turn to 3000 via heading 050° and SAW R-095 to YEXJO Int and hold.

AWOS-3  
**118.375**

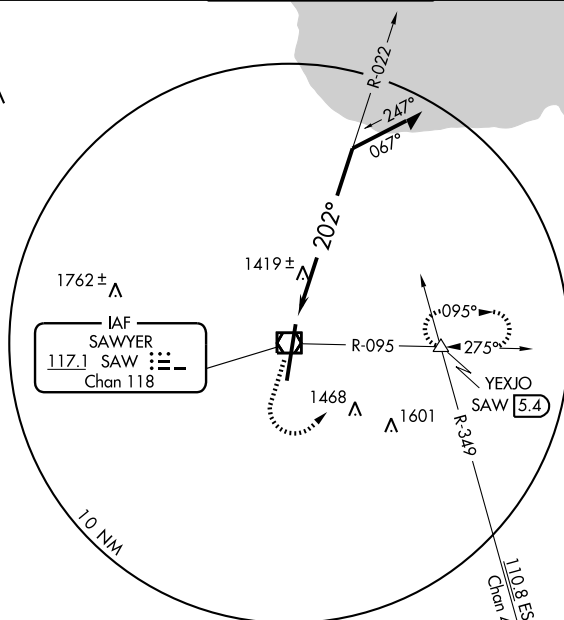
MINNEAPOLIS CENTER  
**119.1 290.2**

SAWYER TOWER ★  
**119.975 (CTAF) 0**

GND CON  
**121.65**

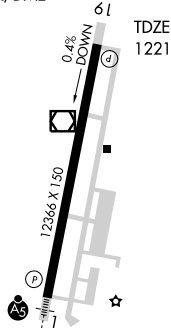
UNICOM  
**122.7**

2115±  $\Delta$



ELEV 1221

202° to  
 SAW VOR/DME



1800

3000

HDG 050°  
 SAW R-095  
 117.1

YEXJO  
 $\Delta$

VOR/DME

Remain  
 within 10 NM

022°  
 3000  
 202°

HIRL Rwy 1-19  $\bullet$   
 REIL Rwy 19  $\bullet$

MARQUETTE, MICHIGAN  
 Orig 10098

MARQUETTE/ SAWYER INTL (SAW)

46°21'N - 87°24'W

# VOR RWY 19

**MARSHALL****BROOKS FLD** (RMY) 1 S UTC-5(-4DT) N42°15.07' W84°57.33'

941 B FUEL 100LL, TPA-1941(1000) NOTAM FILE RMY

RWY 10-28: H3501X75 (ASPH) S-20 MIRL

RWY 10: PAPI (P4L)—GA 4.0° TCH 25'. Tree.

RWY 28: PAPI (P4R)—GA 4.0° TCH 36'. Trees.

**AIRPORT REMARKS:** Attended 1300Z†—dusk except major holidays.

Parachute activity on and in/ovf arpt. Snow removal in progress 15 Nov-15 Apr. Vehicle operators monitor CTAF. Noise abatement procedures in effect ctc arpt manager 269-781-5183 extension 1150. CAUTION: Deer on and in/ovf arpt. Extensive glider and ultralight activity on and in/ovf arpt. Ultralight acft ops south of Rwy 10-28. Ultralight acft fly left hand pattern 500' AGL, S of Rwy 10-28. MIRL Rwy 10-28 and H1 perimeter lgts preset low ints, to increase ints ACTIVATE—CTAF.

**WEATHER DATA SOURCES:** AWOS-3 120.025 (269) 781-9070.**COMMUNICATIONS:** CTAF/UNICOM 122.8

BATTLE CREEK RCD 122.2 (LANSING RADIO)

⑥ KALAMAZOO APP/DEP CON 119.2 (1100-0400Z†)

⑥ CHICAGO CENTER APP/DEP CON 127.55 (0400-1100Z†)

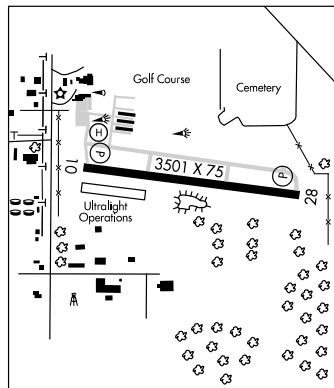
**RADIO AIDS TO NAVIGATION:** NOTAM FILE BTL.

BATTLE CREEK (T) VORTACW 109.4 BTL Chan 31 N42°18.59'

W85°15.14' 107°13.7 NM to fld. 922/2W.

HELIPAD H1: H50X50 (CONC) S-12.5 PERIMETER LGTS

HELIPAD H1: Pole.

**HELIPORT REMARKS:** 150' lgtd water twr 3000' south of pad. 21' lgtd pole 195' northeast of pad. No snow removal.**MASON JEWETT FLD** (TEW) 1 SE UTC-5(-4DT) N42°33.95' W84°25.39'

920 B FUEL 100LL, JET A NOTAM FILE TEW

RWY 10-28: H4000X75 (ASPH) S-12.5 MIRL

RWY 10: REIL. PAPI(P4L)—GA 4.0° TCH 35'. Antenna. Rgt tfc.

RWY 28: REIL. PAPI(P4L)—GA 3.0° TCH 25'. Road.

**AIRPORT REMARKS:** Unattended. Powered parachutes prohibited. Deer and birds on and in/ovf arpt. Hangar space as avbl; confirm by prior arrangement. MIRL Rwy 10-28; PAPI and REIL Rwy 10 and 28 and rotating bcen ops SS-0500Z†, after 0500Z† ACTIVATE—CTAF. Rwy 28 PAPI unusable byd 7° right and left of centerline.

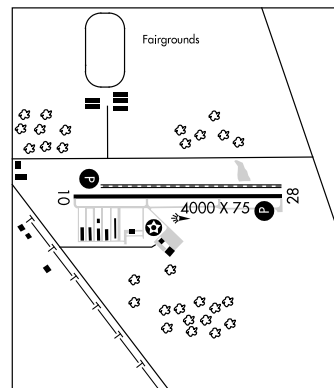
**WEATHER DATA SOURCES:** AWOS-3 119.425 (517) 676-5607.**COMMUNICATIONS:** CTAF/UNICOM 122.7

⑥ LANSING APP/DEP CON 118.65

**RADIO AIDS TO NAVIGATION:** NOTAM FILE LAN.

LANSING (L) VORTACW 110.8 LAN Chan 45 N42°43.04'

W84°41.85' 132°15.2 NM to fld. 887/5W.

**MASON CO** (See LUDINGTON)**MBS INTL** (See SAGINAW)**MECOSTA MORTON** (27C) 2 W UTC-5(-4DT) N43°37.75' W85°15.75'

1022 NOTAM FILE LAN

RWY 09-27: 2027X100 (TURF)

RWY 09: Thld dspld 546'. Road.

RWY 27: Brush.

RWY 03-21: 2010X100 (TURF)

RWY 03: Thld dspld 760'. Trees.

RWY 21: Thld dspld 460'. Trees.

**AIRPORT REMARKS:** Unattended. Arpt CLOSED when rwy are snow covered or with standing water. No winter snow removal. Model aircraft area east of Rwy 03-21 intersection. Rwy 03-21 and dspld thld marked with 18 inch yellow cones. Rwy 09-27 and dspld thld marked with 18 inch yellow cones.

**COMMUNICATIONS:** CTAF 122.9

DETROIT

L-28J

IAP

DETROIT

L-28J

IAP

CHICAGO


VOR BTL	APP CRS	Rwy Idg	<b>3501</b>
<b>109.4</b>	<b>287°</b>	TDZE	<b>940</b>
Chn <b>31</b>		Apt Elev	<b>941</b>

VOR or GPS RWY 28  
MARSHALL / BROOKS FIELD (RMY)


**MISSED APPROACH:** Climbing left turn to 2700 via BTL R-107 to ALBIO Int/BTL 19 DME and hold.

AWOS-3  
120.025

KALAMAZOO APP CON  
119.2 340.9

UNICOM  
122.8 (CTAF) 

1956

BATTLE CREEK  
109.4 BTL   
Chan 31

2700  
-107°.  
(19)

$$\begin{array}{c} \Delta^{1359} \\ 1296 \Delta \quad \Delta^{1229} \\ \Delta \end{array}$$

(IAF)  
ALBIO INT  
BTL 19)

287°  
min  
7°

2700  
-347°  
110.1

ELEV 941

TDZ  
940  
8

287° 5 NM  
from FAF

2700  
↖

ALBIO INT  
BTL 19)ALBIO  
BTI 19

Remain  
within 10 NM

$$\begin{array}{r} 107^\circ \rightarrow \\ \hline \leftarrow 287^\circ \end{array} \quad \underline{2700}$$
MIRL Rwy 10-28 **L**

FAF to MAP 5 NM

Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40

CATEGORY	A	B	C	D
S-28	1400-1	460 (500-1)	1400-1¼ 460 (500-1¼)	NA
CIRCLING	1460-1	519 (600-1)	1460-1½ 519 (600-1½)	NA

MARSHALL, MICHIGAN  
Amdt 14 08213

42°15'N - 84°57'W

MARSHALL / BROOKS FIELD (RMY)  
VOR or GPS RWY 28

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1. 23 SEP 2010 to 21 OCT 2010

**MARSHALL****BROOKS FLD** (RMY) 1 S UTC-5(-4DT) N42°15.07' W84°57.33'

941 B FUEL 100LL, TPA-1941(1000) NOTAM FILE RMY

RWY 10-28: H3501X75 (ASPH) S-20 MIRL

RWY 10: PAPI (P4L)—GA 4.0° TCH 25'. Tree.

RWY 28: PAPI (P4R)—GA 4.0° TCH 36'. Trees.

**AIRPORT REMARKS:** Attended 1300Z†—dusk except major holidays.

Parachute activity on and in/ovf arpt. Snow removal in progress 15 Nov-15 Apr. Vehicle operators monitor CTAF. Noise abatement procedures in effect ctc arpt manager 269-781-5183 extension 1150. CAUTION: Deer on and in/ovf arpt. Extensive glider and ultralight activity on and in/ovf arpt. Ultralight acft ops south of Rwy 10-28. Ultralight acft fly left hand pattern 500' AGL, S of Rwy 10-28. MIRL Rwy 10-28 and H1 perimeter lgts preset low ints, to increase ints ACTIVATE—CTAF.

**WEATHER DATA SOURCES:** AWOS-3 120.025 (269) 781-9070.**COMMUNICATIONS:** CTAF/UNICOM 122.8

BATTLE CREEK RCD 122.2 (LANSING RADIO)

Ⓡ KALAMAZOO APP/DEP CON 119.2 (1100-0400Z†)

Ⓡ CHICAGO CENTER APP/DEP CON 127.55 (0400-1100Z†)

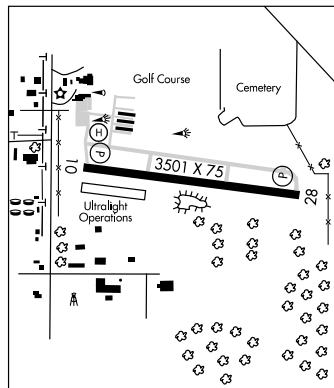
**RADIO AIDS TO NAVIGATION:** NOTAM FILE BTL.

BATTLE CREEK (T) VORTACW 109.4 BTL Chan 31 N42°18.59'

W85°15.14' 107°13.7 NM to fld. 922/2W.

HELIPAD H1: H50X50 (CONC) S-12.5 PERIMETER LGTS

HELIPAD H1: Pole.

**HELIPORT REMARKS:** 150' lgtd water twr 3000' south of pad. 21' lgtd pole 195' northeast of pad. No snow removal.**MASON JEWETT FLD** (TEW) 1 SE UTC-5(-4DT) N42°33.95' W84°25.39'

920 B FUEL 100LL, JET A NOTAM FILE TEW

RWY 10-28: H4000X75 (ASPH) S-12.5 MIRL

RWY 10: REIL. PAPI(P4L)—GA 4.0° TCH 35'. Antenna. Rgt tfc.

RWY 28: REIL. PAPI(P4L)—GA 3.0° TCH 25'. Road.

**AIRPORT REMARKS:** Unattended. Powered parachutes prohibited. Deer and birds on and in/ovf arpt. Hangar space as avbl; confirm by prior arrangement. MIRL Rwy 10-28; PAPI and REIL Rwy 10 and 28 and rotating bcn ops SS-0500Z†, after 0500Z†

ACTIVATE—CTAF. Rwy 28 PAPI unusable byd 7° right and left of centerline.

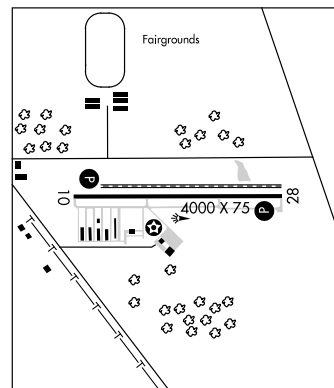
**WEATHER DATA SOURCES:** AWOS-3 119.425 (517) 676-5607.**COMMUNICATIONS:** CTAF/UNICOM 122.7

Ⓡ LANSING APP/DEP CON 118.65

**RADIO AIDS TO NAVIGATION:** NOTAM FILE LAN.

LANSING (L) VORTACW 110.8 LAN Chan 45 N42°43.04'

W84°41.85' 132°15.2 NM to fld. 887/5W.

**MASON CO** (See LUDINGTON)**MBS INTL** (See SAGINAW)**MECOSTA MORTON** (27C) 2 W UTC-5(-4DT) N43°37.75' W85°15.75'

1022 NOTAM FILE LAN

RWY 09-27: 2027X100 (TURF)

RWY 09: Thld dspld 546'. Road.

RWY 27: Brush.

RWY 03-21: 2010X100 (TURF)

RWY 03: Thld dspld 760'. Trees.

RWY 21: Thld dspld 460'. Trees.

**AIRPORT REMARKS:** Unattended. Arpt CLOSED when rwy are snow covered or with standing water. No winter snow removal. Model aircraft area east of Rwy 03-21 intersection. Rwy 03-21 and dspld thld marked with 18 inch yellow cones. Rwy 09-27 and dspld thld marked with 18 inch yellow cones.

**COMMUNICATIONS:** CTAF 122.9**DETROIT**

L-28J

IAP

**DETROIT**

L-28J

IAP

**CHICAGO**



APP CRS <b>275°</b>	Rwy Idg TDZE Apt Elev	<b>4000</b> <b>919</b> <b>919</b>
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# GPS RWY 28

MASON JEWETT FIELD (TEW)

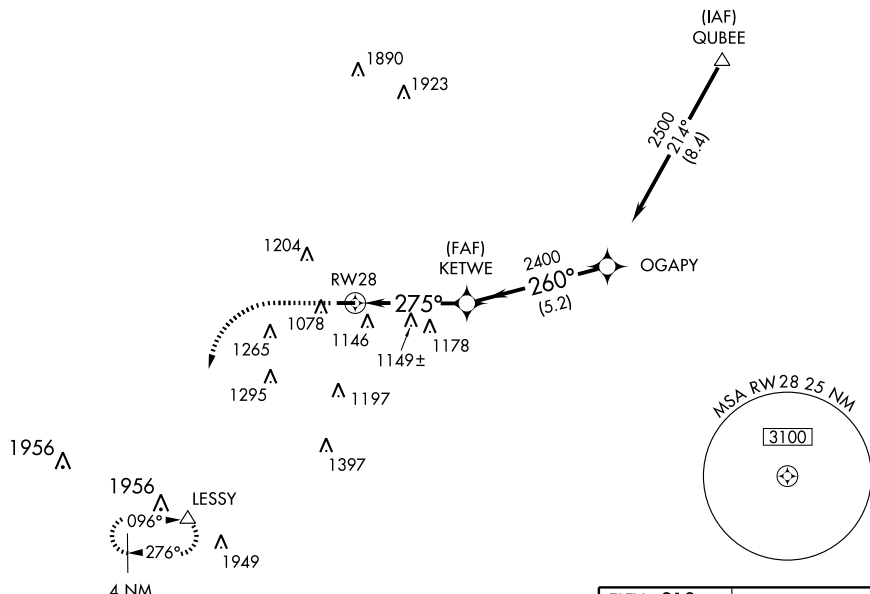


MISSED APPROACH: Climb to 1700 then climbing left turn to 3000 direct LESSY and hold.

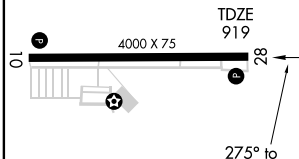
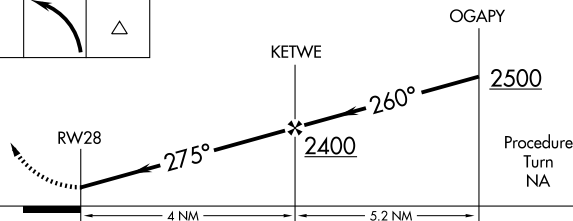
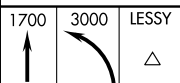
AWOS-3  
**119.425**

LANSING APP CON  
**118.65 226.40**

UNICOM  
**122.7 (CTAF) 0**



ELEV 919



CATEGORY	A	B	C	D
S-28	1400-1	481 (500-1)	NA	
CIRCLING	1560-1	641 (700-1)	NA	

MIRL Rwy 10-28 0  
REIL Rwy 10 and 28 0

VORTAC LAN <b>110.8</b> Chan <b>45</b>	APP CRS <b>132°</b>	Rwy Idg TDZE Apt Elev	<b>N/A</b> <b>N/A</b> <b>919</b>
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**VOR or GPS-A**  
MASON JEWETT FIELD (TEW)



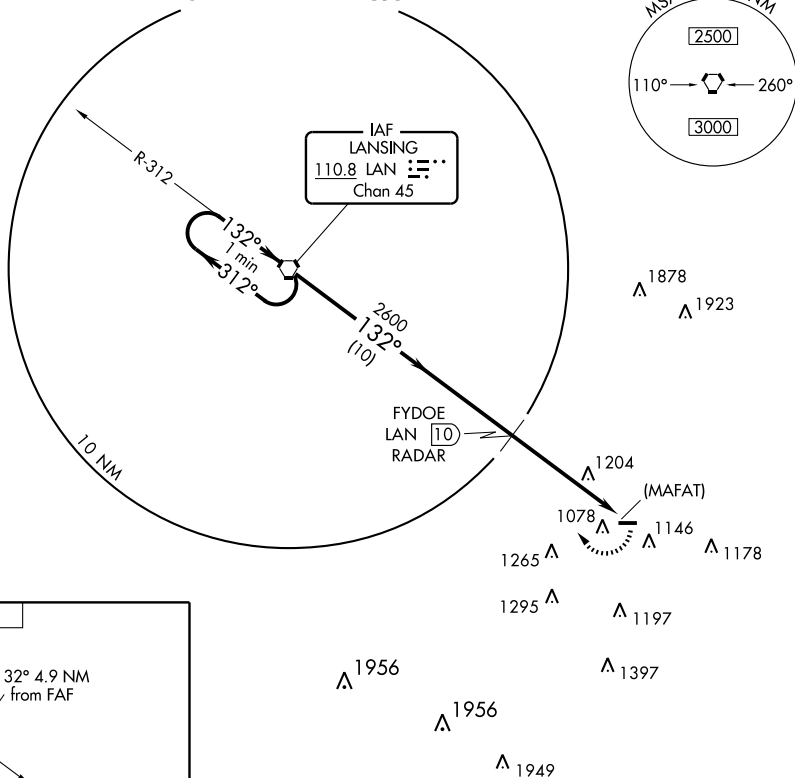
MISSED APPROACH: Climbing right turn to 2600  
via LAN R-132 to LAN VORTAC and hold.

AWOS-3  
**119.425**

LANSING APP CON  
**118.65 226.40**

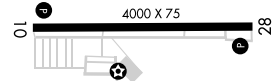
UNICOM  
**122.7** (CTAF) **0**

**DME or RADAR REQUIRED**



ELEV 919

132° 4.9 NM  
from FAF



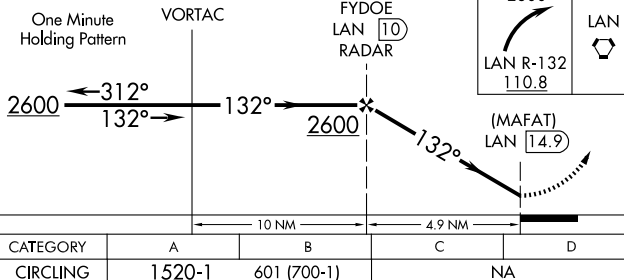
MIRL Rwy 10-28

REIL Rwy 10 and 28

FAF to MAP 4.9 NM

Knots	60	90	120	150	180
Min:Sec	4:54	3:16	2:27	1:58	1:38

One Minute  
Holding Pattern



**MENOMINEE-MARINETTE TWIN CO** (MNM) 1 NW UTC-6(-5DT)

N45°07.60' W87°38.31'

625 B S2 FUEL 100LL, JET A NOTAM FILE MNM

RWY 03-21: H6000X100(ASPH) S-80, D-100, 2S-127,  
2D-175 HIRL

RWY 03: MALSR.

RWY 21: PAPI(P4L)—GA 3.0° TCH 43'.

RWY 14-32: H5100X100 (ASPH-PFC) S-30, D-35,  
DT-60 MIRL 0.3% up NW

RWY 14: VASI(V4L)—GA 3.0° TCH 41'. Trees.

RWY 32: VASI(V4L)—GA 3.0° TCH 39'. Tree.

**AIRPORT REMARKS:** Attended Mon-Fri 1400-2300Z, Sat 1400-1800Z, for attendant after hrs call 715-938-2006 or 906-282-0260. 24 hr self-serve 100LL with major credit card. Deer and gulls on and in/ov arpt. Avoid over flight of noise sensitive area lctd 7 miles S of arpt. 48 hr PPR for unscheduled air carrier ops with more than 30 passenger seats call 906-863-8408. ACTIVATE HIRL Rwy 03-21, MIRL Rwy 14-32; VASI Rwy 14, and Rwy 32, PAPI Rwy 21; MALSR Rwy 03—CTAF.

**WEATHER DATA SOURCES:** AWOS-3 109.6 MNM (906) 863-8801.**COMMUNICATIONS:** CTAF/UNICOM 122.8

RCO 122.1R 109.6T (GREEN BAY RADIO)

GREEN BAY APP/DEP CON 119.5 (1130-0530Z)

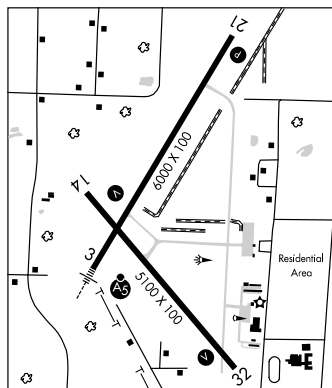
⑤ MINNEAPOLIS CENTER APP/DEP CON 125.55 (0530-1130Z)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE MNM.

(L) VOR/DME 109.6 MNM Chan 33 N45°10.81' W87°38.83' 173° 3.2 NM to fld. 650/00E. AWOS-3.

TRIBE NDB (LOM) 239 TN N45°03.70' W87°41.76' 035° 4.6 NW to fld.

ILS 108.7 I-TNQ Rwy 03. Class IB. LOM TRIBE NDB. ILS unmonitored.

**MERILLAT** (See TECUMSEH)**MEYERS-DIVER'S** (See TECUMSEH)**MIDLAND****JACK BARSTOW** (IKW) 3 NW UTC-5(-4DT) N43°39.78' W84°15.68'

635 B S4 FUEL 100LL, JET A NOTAM FILE LAN

RWY 06-24: H3801X75 (ASPH) S-24 MIRL 0.4% up NE

RWY 06: REIL. PAPI(P2L). Road.

RWY 24: REIL. PAPI(P2L). Trees.

RWY 18-36: H3001X75 (ASPH) S-24 MIRL

RWY 18: REIL. PAPI(P2L). Trees.

RWY 36: REIL. PAPI(P2L). Trees.

**AIRPORT REMARKS:** Attended Mon-Fri 1300-2300Z, Sat-Sun 1300-2100Z. Arpt unattended major holidays. Deer on and in/ov arpt. Occasional ultralight activity. Noise sensitive area S of arpt; use preferred Rwy 06-24. MIRL Rwy 06-24 and Rwy 18-36 present on low ints dusk-0400Z. After 0400Z ACTIVATE—CTAF. To increase ints and ACTIVATE PAPI and REIL Rwy 06, 24, 18 and 36—CTAF.

**WEATHER DATA SOURCES:** AWOS-3 119.525 (989) 835-5841.**COMMUNICATIONS:** CTAF/UNICOM 122.8

⑤ SAGINAW APP/DEP CON 126.45 (1100-0400Z)

⑤ CLEVELAND CENTER APP/DEP CON 127.7 (0400-1100Z)

GCO 121.725 (SAGINAW CLNC and FLIGHT SERVICES)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE MBS.

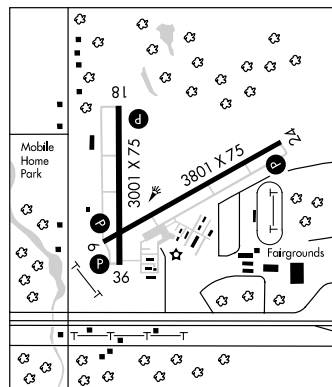
SAGINAW (L) VOR/DME 112.9 MBS Chan 76 N43°31.90'

W84°04.64' 318° 11.2 NM to fld. 663/3W. HIWAS.

**COMM/NAV/WEATHER REMARKS:** GCO OTS indef.**DETROIT**

L-28J, 31C

IAP



# ILS or LOC RWY 3

MENOMINEE-MARINETTE TWIN COUNTY (MNM)

LOC I-TNQ <b>108.7</b>	APP CRS <b>034°</b>	Rwy Idg <b>6000</b> TDZE <b>624</b> Apt Elev <b>625</b>
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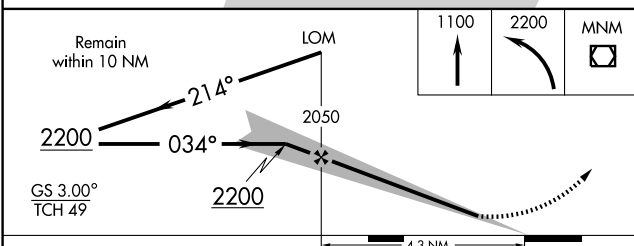
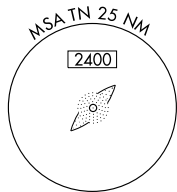
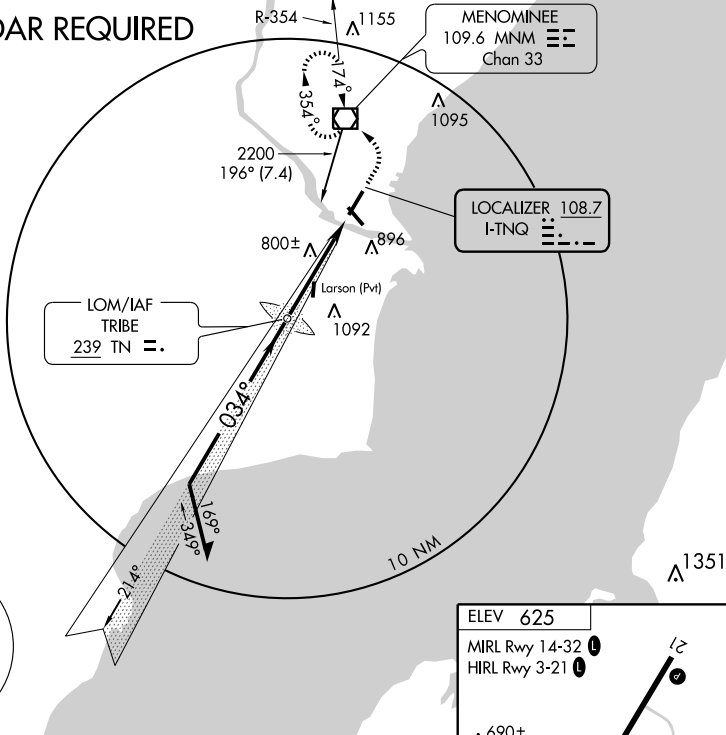
**NA** When local altimeter setting not received, use Sturgeon Bay altimeter setting and increase all DA/MDA 60 feet, increase S-LOC 3 Cat C/D and Circling Cat C visibility ¼ mile. For inoperative MALS when using Sturgeon Bay altimeter setting, increase S-ILS 3 all Cats visibility to 1 mile.



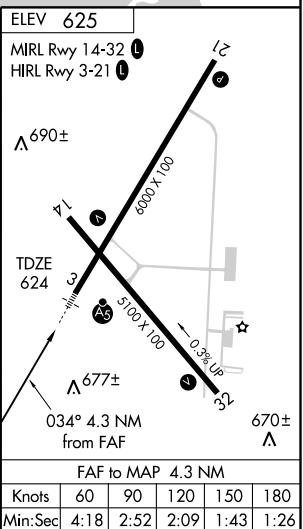
**MISSED APPROACH:** Climb to 1100, then climbing left turn to 2200 direct MNM VOR/DME and hold.

AWOS-3 <b>109.6</b>	GREEN BAY APP CON ★ <b>119.5 338.2</b>	UNICOM <b>122.8 (CTAF) 0</b>
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## ADF or RADAR REQUIRED



CATEGORY	A	B	C	D
S-ILS 3		824-½	200 (200-½)	
S-LOC 3	1100-½	476 (500-½)	1100-¾ 476 (500-¾)	1100-1 476 (500-1)
CIRCLING	1200-1	575 (600-1)	1200-1½ 575 (600-1½)	1200-2 575 (600-2)



LOM TN <b>239</b>	APP CRS <b>034°</b>	Rwy Idg TDZE Apt Elev	<b>6000</b> <b>624</b> <b>625</b>
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**NA** When local altimeter setting not received, use Sturgeon Bay altimeter setting and increase all MDA 60 feet, increase S-3 Cat C/D and Circling Cat C visibility ¼ mile.

MALSR



MISSED APPROACH: Climbing left turn to 2200 direct MNM VOR/DME and hold.

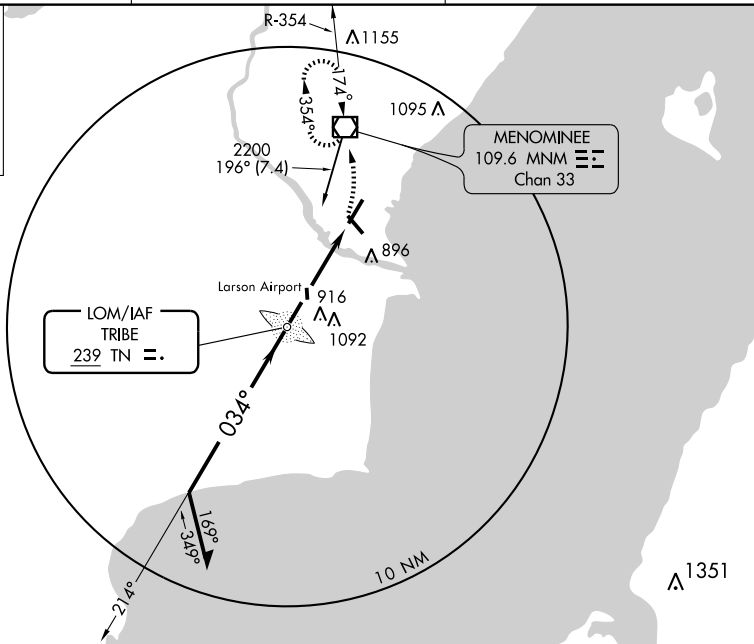
AWOS-3  
**109.6**

GREEN BAY APP CON★  
**119.5 338.2**

UNICOM  
**122.8 (CTAF) 0**

ALTERNATE  
MISSED APCH FIX  
TRIBE

239 TN =.



LOM/IAF  
TRIBE  
239 TN =.

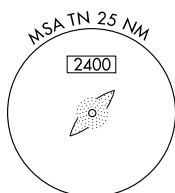
Larson Airport

916  
1092

034°  
169°  
34°

10 NM

1351



Remain  
within 10 NM

2200

214°

LOM

034°

2200

3.39°  
TCH 40

4.3 NM



ELEV 625

MIRL Rwy 14-32

HIRL Rwy 3-21

690±

TDZE  
624

677±  
034° 4.3 NM  
from FAF

FAF to MAP 4.3 NM

Knots	60	90	120	150	180
Min:Sec	4:18	2:52	2:09	1:43	1:26

WAAS  
CH 73014  
W03A

APP CRS  
034°

Rwy Idg	<b>6000</b>
TDZE	<b>624</b>
Apt Elev	<b>625</b>

## RNAV (GPS) RWY 3

MENOMINEE-MARINETTE TWIN COUNTY (MNM)



**T** For inoperative MALSR, increase LNAV Cat D visibility to 1¼ . For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Sturgeon Bay altimeter setting and increase all DA/MDA 60 feet, increase LNAV Cat C and Circling Cat C visibility ¼ mile. Baro-VNAV and VDP NA when using Sturgeon Bay altimeter setting. For inoperative MALSR when using Sturgeon Bay altimeter setting, increase LPV all Cats visibility to 1 mile.

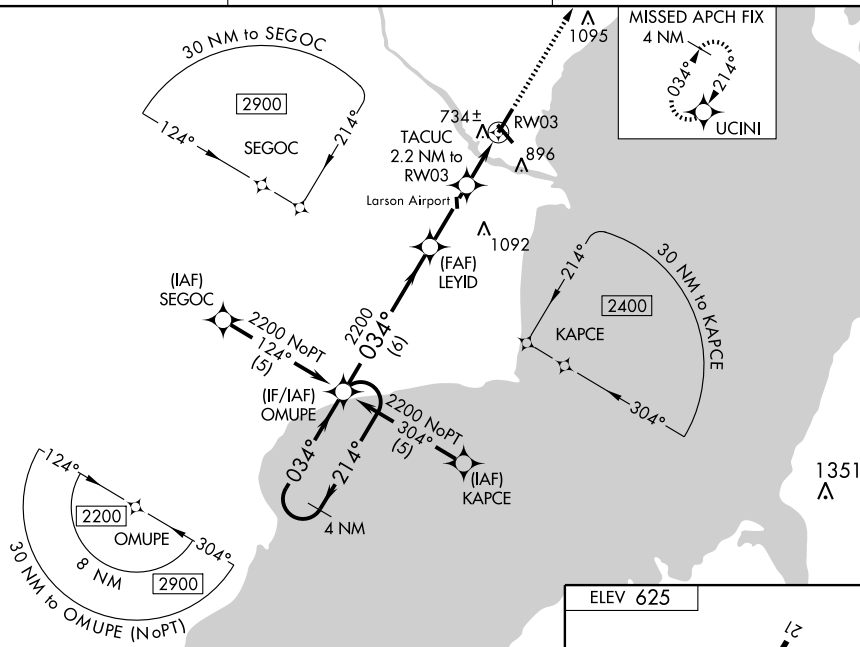
MALSR



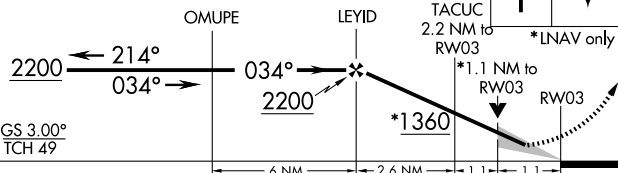
**MISSED APPROACH:**  
Climb to 2300 direct  
UCINI and hold.

AWOS-3  
**109.6**

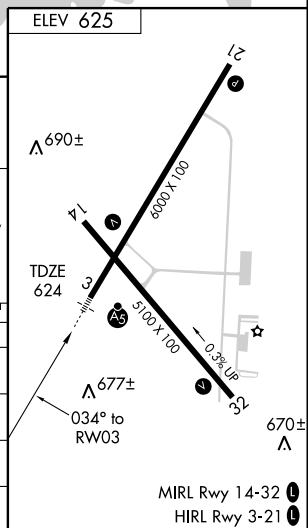
GREEN BAY APP CON ★  
119.5 338.2

UNICOM  
122.8 (CTAF) **L**

4 NM  
Holding Pattern



CATEGORY	A	B	C	D
LPV DA	824-1/2 200 (200-1/2)			
LNAV/VNAV DA	1150-1 1/2 526 (600-1 1/2)			
LNAV MDA	1000-1/2 376 (400-1/2)			1000-1 376 (400-1)
CIRCLING	1200-1 575 (600-1)		1200-1 1/2 575 (600-1 1/2)	1200-2 575 (600-2)



MENOMINEE, MICHIGAN  
Orig 10266

MENOMINEE-MARINETTE TWIN COUNTY (MNM)

45°08'N - 87°38'W

## RNAV (GPS) RWY 3

APP CRS	Rwy Idg	<b>6000</b>
<b>214°</b>	TDZE	<b>625</b>
	Apt Elev	<b>625</b>

**RNAV (GPS) RWY 21**

MENOMINEE-MARINETTE TWIN COUNTY (MNM)

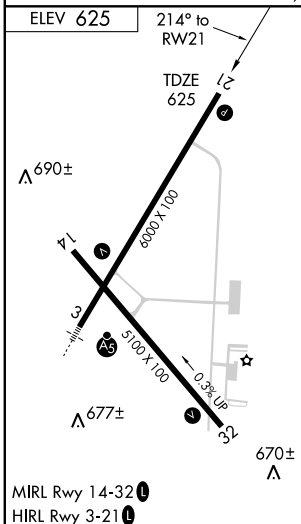
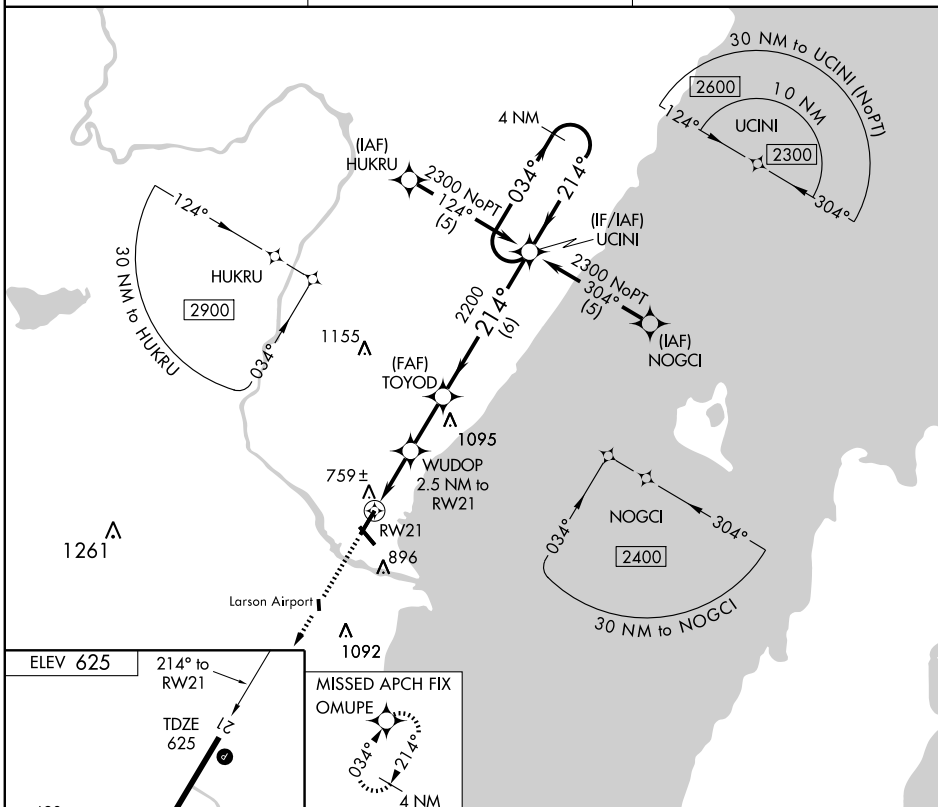
**⚠** DME/DME RNP-0.3 NA. When local altimeter setting not received, use Sturgeon Bay altimeter setting and increase all MDA 60 feet, increase LNAV Cat C/D and Circling Cat C visibility ¼ mile. VDP NA when using Sturgeon Bay altimeter setting.

**MISSED APPROACH:** Climb to 2200 direct OMUPE and hold.

AWOS-3  
**109.6**

GREEN BAY APP CON ★  
**119.5 338.2**

UNICOM  
**122.8 (CTAF) ①**



2200 OMUPE		4 NM Holding Pattern	
WUDOP 2.5 NM to RWY 21		UCINI	
1.1 NM to RWY 21		TOYOD	
RWY 21		2200	
1.1		1.4	
2.3 NM		6 NM	
CATEGORY	A	B	C
LNAV MDA	1020-1	395 (400-1)	1020-1¼ 395 (400-1¼)
CIRCLING	1200-1	575 (600-1)	1200-1½ 575 (600-1½)
			1200-2 575 (600-2)

APP CRS  
323°

Rwy Idg	<b>5100</b>
TDZE	<b>608</b>
Apt Elev	<b>625</b>

## RNAV (GPS) RWY 32

MENOMINEE-MARINETTE TWIN COUNTY (MNM)

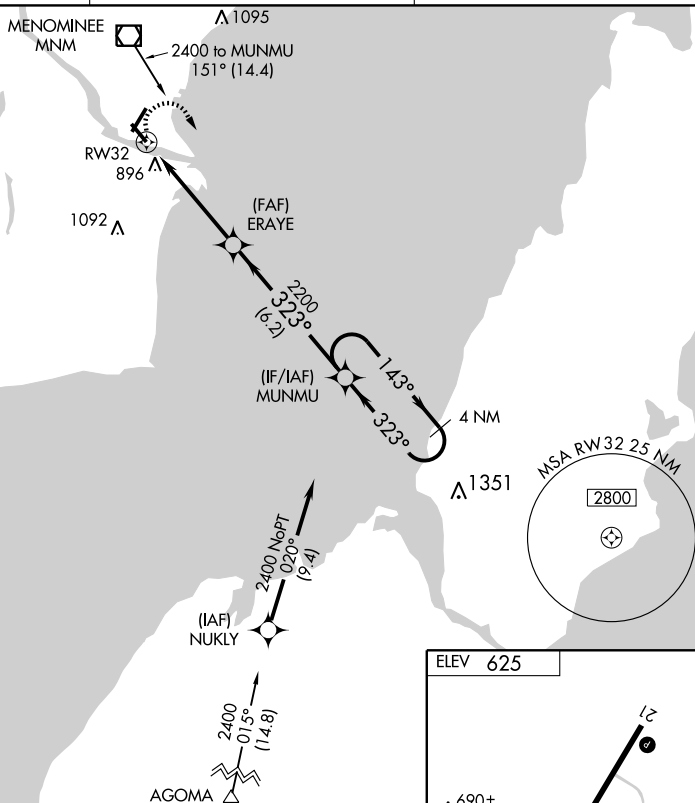


DME/DME RNP-0.3 NA. When local altimeter setting not received, use Sturgeon Bay altimeter setting and increase all MDA 60 feet, increase LNAV Cat C/D and Circling Cat C visibility ¼ mile.

**MISSED APPROACH:** Climbing right turn to 2400 direct MUNMU WP and hold.

AWOS-3  
109.6

GREEN BAY APP CON ★  
119.5 338.2

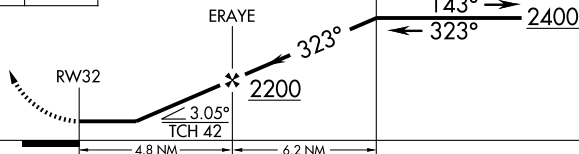
UNICOM  
122.8 (CTAF) **L**

2400	MUNMU
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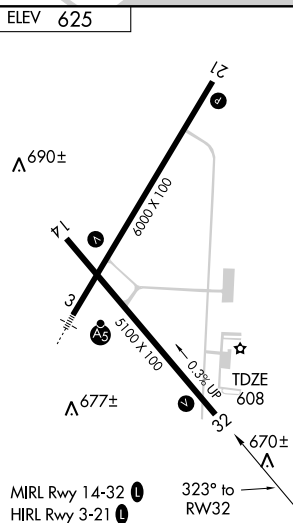


MUNMU Holding Pattern

## Holding Pattern



CATEGORY	A	B	C	D
INAV MDA	1160-1	552 (600-1)	1160-1½ 552 (600-1½)	1160-1¾ 552 (600-1¾)
CIRCLING	1200-1	575 (600-1)	1200-1½ 575 (600-1½)	1200-2 575 (600-2)



**MENOMINEE, MICHIGAN**

Orig-B 10266

MENOMINEE-MARINETTE TWIN COUNTY (MNM)

45°08'N - 87°38'W

## RNAV (GPS) RWY 32

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1. 23 SEP 2010 to 21 OCT 2010



VOR/DME MNM Chan <b>33</b>	APP CRS <b>174°</b>	Rwy Idg TDZE Apt Elev <b>625</b>	<b>N/A</b> <b>N/A</b>
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# VOR-A

## MENOMINEE-MARINETTE TWIN COUNTY (MNM)

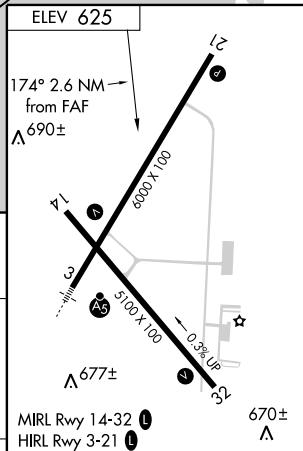
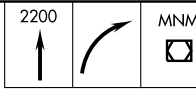
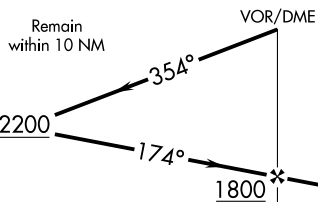
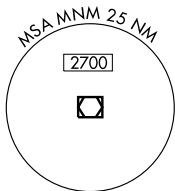
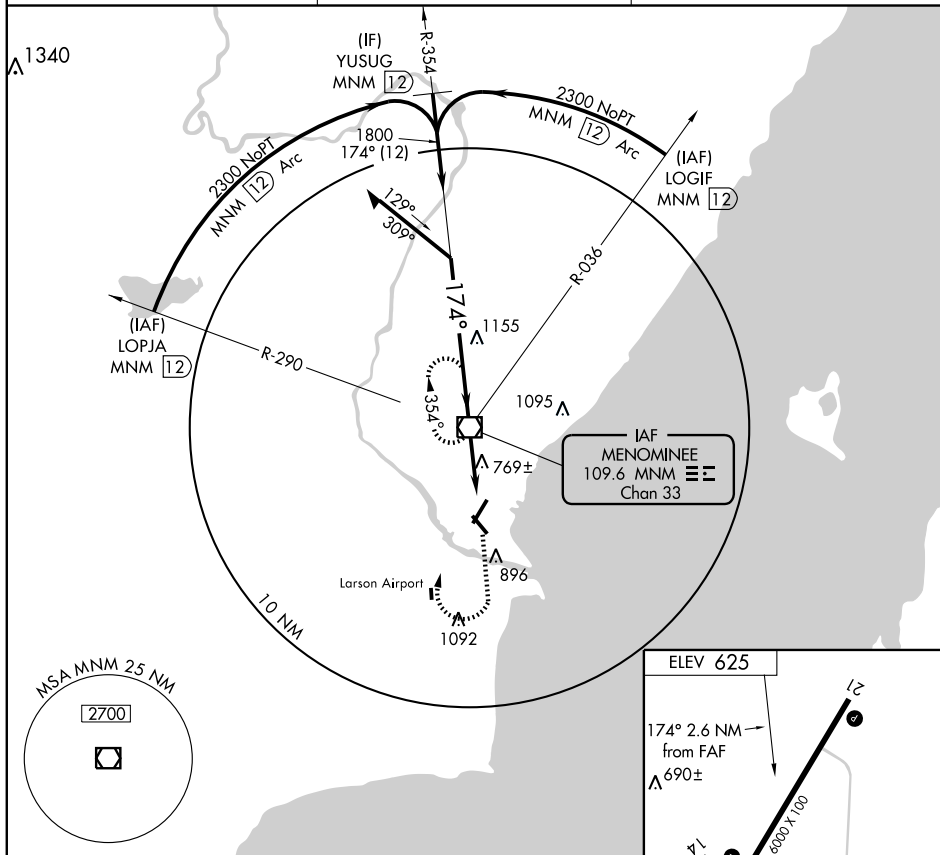
**⚠** When local altimeter setting not received, use Sturgeon Bay altimeter setting and increase MDA 60 feet, increase Circling Cat C visibility ¼ mile.

**MISSED APPROACH:** Climb to 2200 then right turn direct MNM VOR/DME and hold.

AWOS-3  
**109.6**

GREEN BAY APP CON★  
**119.5 338.2**

UNICOM  
**122.8 (CTAF) 0**



CATEGORY	A	B	C	D
CIRCLING	1200-1	575 (600-1)	1200-1½ 575 (600-1½)	1200-2 575 (600-2)

FAF to MAP 2.6 NM					
Knots	60	90	120	150	180
Min:Sec	2:36	1:44	1:18	1:02	0:52

**MENOMINEE-MARINETTE TWIN CO** (MNM) 1 NW UTC-6(-5DT)

N45°07.60' W87°38.31'

625 B S2 FUEL 100LL, JET A NOTAM FILE MNM

RWY 03-21: H6000X100(ASPH) S-80, D-100, 2S-127,  
2D-175 HIRL

RWY 03: MALSR.

RWY 21: PAPI(P4L)—GA 3.0° TCH 43'.

RWY 14-32: H5100X100 (ASPH-PFC) S-30, D-35,  
DT-60 MIRL 0.3% up NW

RWY 14: VASI(V4L)—GA 3.0° TCH 41'. Trees.

RWY 32: VASI(V4L)—GA 3.0° TCH 39'. Tree.

**AIRPORT REMARKS:** Attended Mon-Fri 1400-2300Z, Sat 1400-1800Z, for attendant after hrs call 715-938-2006 or 906-282-0260. 24 hr self-serve 100LL with major credit card. Deer and gulls on and in/ov arpt. Avoid over flight of noise sensitive area lctd 7 miles S of arpt. 48 hr PPR for unscheduled air carrier ops with more than 30 passenger seats call 906-863-8408. ACTIVATE HIRL Rwy 03-21, MIRL Rwy 14-32; VASI Rwy 14, and Rwy 32, PAPI Rwy 21; MALSR Rwy 03—CTAF.

**WEATHER DATA SOURCES:** AWOS-3 109.6 MNM (906) 863-8801.**COMMUNICATIONS:** CTAF/UNICOM 122.8

RCO 122.1R 109.6T (GREEN BAY RADIO)

GREEN BAY APP/DEP CON 119.5 (1130-0530Z)

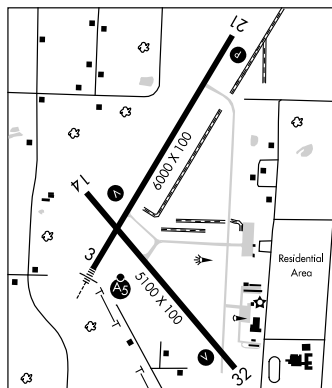
Ⓡ MINNEAPOLIS CENTER APP/DEP CON 125.55 (0530-1130Z)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE MNM.

(L) VOR/DME 109.6 MNM Chan 33 N45°10.81' W87°38.83' 173° 3.2 NM to fld. 650/00E. AWOS-3.

TRIBE NDB (LOM) 239 TN N45°03.70' W87°41.76' 035° 4.6 NW to fld.

ILS 108.7 I-TNQ Rwy 03. Class IB. LOM TRIBE NDB. ILS unmonitored.

**MERILLAT** (See TECUMSEH)**MEYERS-DIVER'S** (See TECUMSEH)**MIDLAND****JACK BARSTOW** (IKW) 3 NW UTC-5(-4DT) N43°39.78' W84°15.68'

635 B S4 FUEL 100LL, JET A NOTAM FILE LAN

RWY 06-24: H3801X75 (ASPH) S-24 MIRL 0.4% up NE

RWY 06: REIL. PAPI(P2L). Road.

RWY 24: REIL. PAPI(P2L). Trees.

RWY 18-36: H3001X75 (ASPH) S-24 MIRL

RWY 18: REIL. PAPI(P2L). Trees.

RWY 36: REIL. PAPI(P2L). Trees.

**AIRPORT REMARKS:** Attended Mon-Fri 1300-2300Z, Sat-Sun 1300-2100Z. Arpt unattended major holidays. Deer on and in/ov arpt. Occasional ultralight activity. Noise sensitive area S of arpt; use preferred Rwy 06-24. MIRL Rwy 06-24 and Rwy 18-36 present on low ints dusk-0400Z. After 0400Z ACTIVATE—CTAF. To increase ints and ACTIVATE PAPI and REIL Rwy 06, 24, 18 and 36—CTAF.

**WEATHER DATA SOURCES:** AWOS-3 119.525 (989) 835-5841.**COMMUNICATIONS:** CTAF/UNICOM 122.8

Ⓡ SAGINAW APP/DEP CON 126.45 (1100-0400Z)

Ⓡ CLEVELAND CENTER APP/DEP CON 127.7 (0400-1100Z)

GCO 121.725 (SAGINAW CLNC and FLIGHT SERVICES)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE MBS.

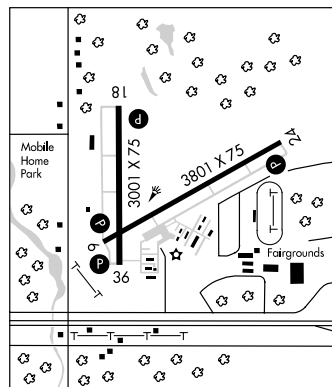
SAGINAW (L) VOR/DME 112.9 MBS Chan 76 N43°31.90'

W84°04.64' 318° 11.2 NM to fld. 663/3W. HIWAS.

**COMM/NAV/WEATHER REMARKS:** GCO OTS indef.**DETROIT**

L-28J, 31C

IAP



APP CRS	Rwy Idg	<b>3801</b>
<b>066°</b>	TDZE	<b>628</b>
	Apt Elev	<b>635</b>

# RNAV (GPS) RWY 6

MIDLAND / JACK BARSTOW (IKW)

**▼** DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.  
**▲** When local altimeter setting not received, use MBS Intl altimeter setting and increase all MDA 40 feet and LNAV Cat C visibility ¼ mile.

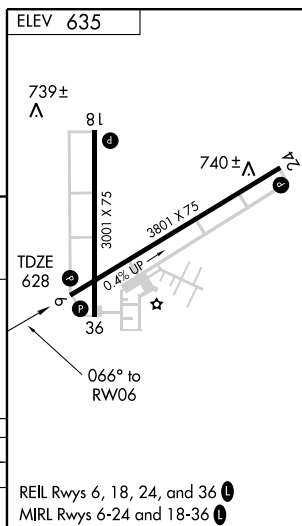
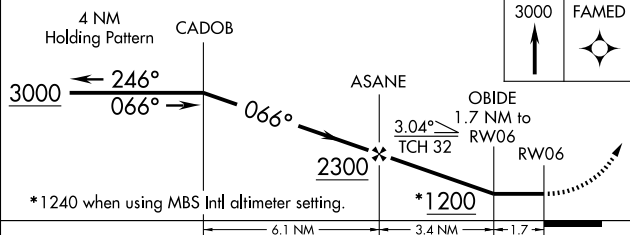
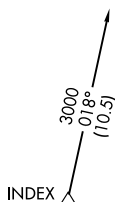
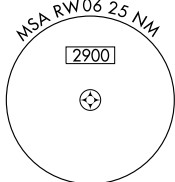
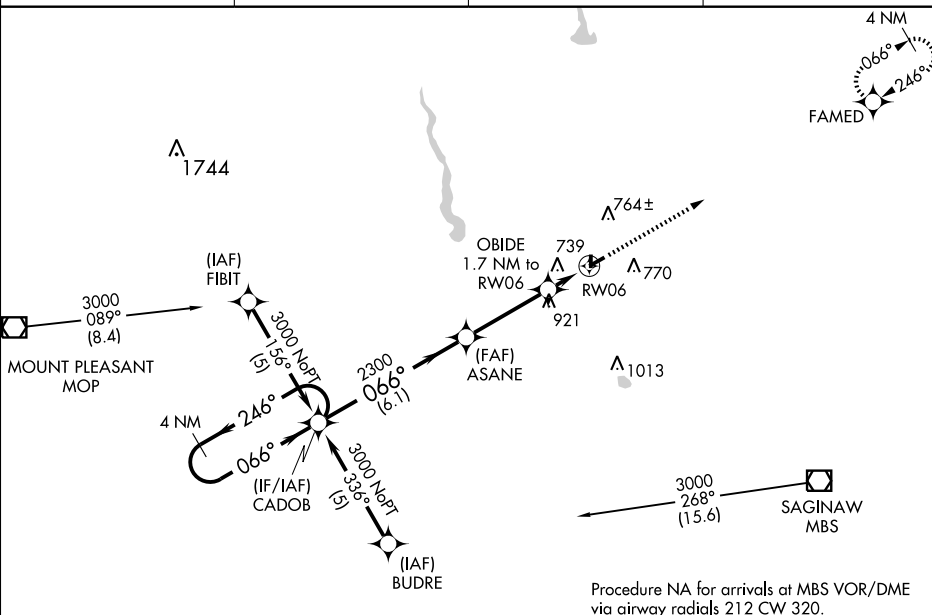
MISSED APPROACH: Climb to 3000 direct FAMED and hold.

AWOS-3  
**119.525**

SAGINAW APP CON ★  
**126.45 235.625**

GCO  
**121.725**

UNICOM  
**122.8 (CTAF)**



WAAS CH <b>72912</b> <b>W24A</b>	APP CRS <b>246°</b>	Rwy Idg TDZE Apt Elev	<b>3801</b> <b>635</b> <b>635</b>
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**RNAV (GPS) RWY 24**

MIDLAND / JACK BARSTOW (IKW)

▼ Baro-VNAV NA when using MBS Intl altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 54°C (130°F). DME/DME RNP-0.3 NA.  
 ▲ Visibility reduction by helicopters NA. When local altimeter setting not received, use MBS Intl altimeter setting and increase all DA 31 feet and all MDA 40 feet and all LPV visibility ¼ mile.

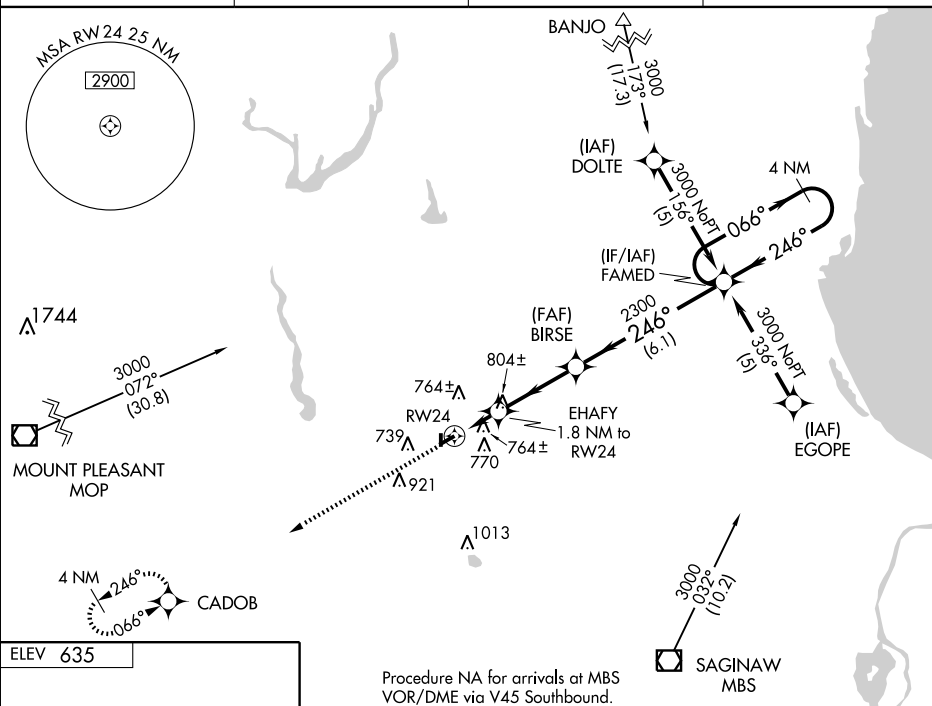
MISSED APPROACH:  
Climb to 3000 direct  
CADOB and hold.

AWOS-3  
**119.525**

SAGINAW APP CON ★  
**126.45 235.625**

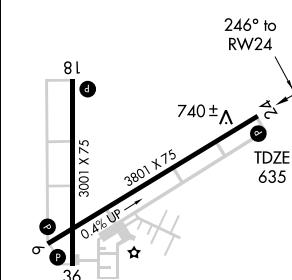
GCO  
**121.725**

UNICOM  
**122.8** (CTAF)



ELEV 635

Procedure NA for arrivals at MBS  
VOR/DME via V45 Southbound.



REIL Rwy 6, 18, 24 and 36  
MIRL Rwy 6-24 and 18-36

Procedure NA for arrivals at MBS VOR/DME via V45 Southbound.				
3000	CADOB	VGSI and RNAV glidepath not coincident.	FAMED	4 NM Holding Pattern
*LNAV only.	EHAFF 1.8 NM to RW24	BIRSE	246°	3000
RW24	*1260	2300	066°	GS 3.00° TCH 53
	1.8	3.2 NM	6.1 NM	
CATEGORY	A	B	C	D
LPV DA	1021-1¼	386 (400-1¼)		NA
LNAV/VNAV DA	1068-1½	433 (500-1½)		NA
LNAV MDA	1060-1	425 (500-1)	1060-1¼ 425 (500-1¼)	NA
CIRCLING	1120-1	485 (500-1)	1120-1½ 485 (500-1½)	NA

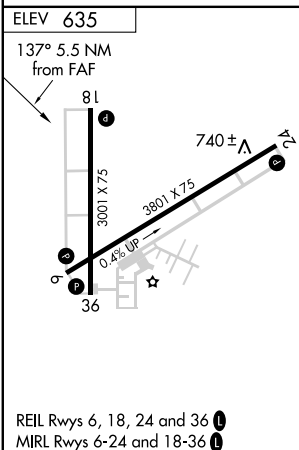
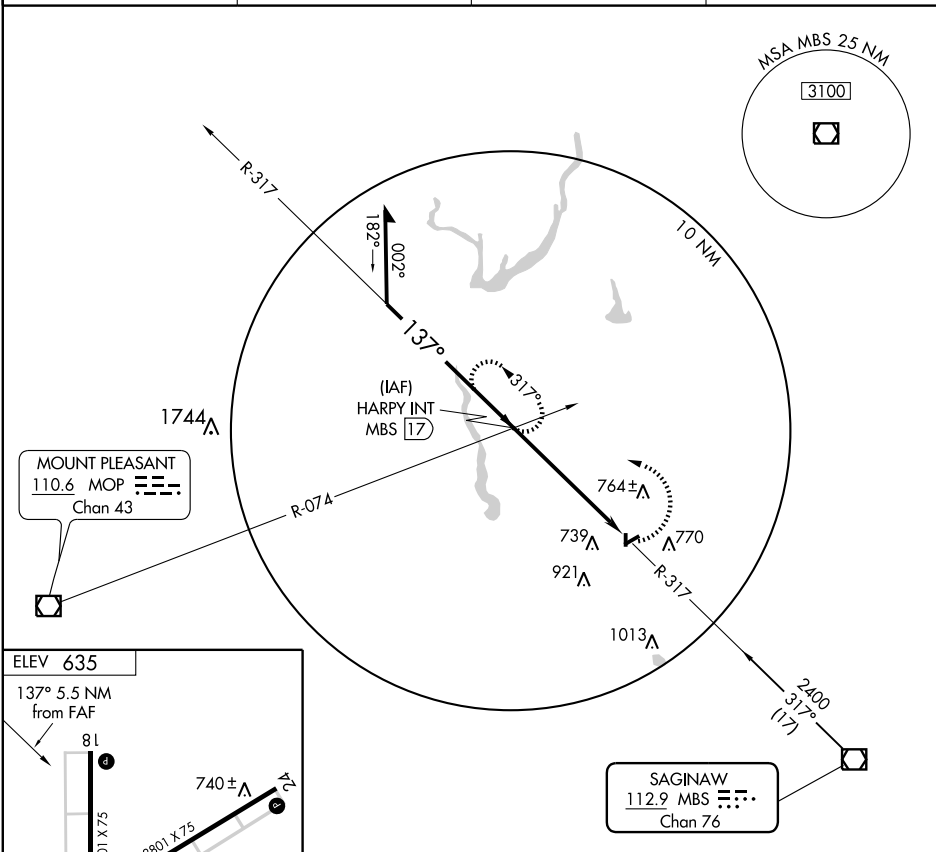
VOR/DME MBS <b>112.9</b> Chan <b>76</b>	APP CRS <b>137°</b>	Rwy Idg TDZE Apt Elev <b>N/A</b> <b>N/A</b> <b>635</b>
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**VOR-A**

MIDLAND/ JACK BARSTOW (IKW)

<p><b>▼</b> <b>▲</b></p> <p>When local altimeter setting not received, use MBS Intl altimeter setting and increase all MDA 40 feet.</p>	<p>MISSED APPROACH: Climbing left turn to 2400 via heading 272° and MBS VOR/DME R-317 to HARRY INT/17 DME and hold.</p>
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AWOS-3 <b>119.525</b>	SAGINAW APP CON ★ <b>126.45 235.625</b>	GCO <b>121.725</b>	UNICOM <b>122.8</b> (CTAF)
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REIL Rwy 6, 18, 24 and 36  
MIRL Rwy 6-24 and 18-36

FAF to MAP 5.5 NM					
Knots	60	90	120	150	180
Min:Sec	5:30	3:40	2:45	2:12	1:50

Remain within 10 NM		HARRY INT MBS 17	2400 HDG 272°	MBS R-317 112.9	HARRY INT
2400		137°	2400	5.5 NM	MBS 11.5
CATEGORY		A	B	C	D
CIRCLING		1140-1	505 (600-1)	1140-1½ 505 (600-1½)	NA

## MIO

**OSCODA CO** (51M) 2N UTC-5(-4DT) N44°40.83' W84°07.50'

LAKE HURON

1050 NOTAM FILE LAN

**Rwy 09-27:** 2800X90 (DIRT) LIRL

**Rwy 09:** Thld dsplcd 978'. Trees.

**Rwy 27:** Thld dsplcd 784'. Trees.

**AIRPORT REMARKS:** Unattended. Arpt CLOSED Dec thru Apr except PPR; confirm rwy condition. Rwy 09-27 sfc rough with large areas of soft sand on rwy. Rwy 09-27 marked with 3' yellow cones. ACTIVATE LIRL Rwy 09-27—CTAF.

**COMMUNICATION:** CTAF 122.9

## MONROE

**CUSTER** (TTF) 2 NW UTC-5(-4DT) N41°56.39' W83°26.08'

DETROIT

616 B S4 **FUEL** 100LL, JET A OX 1 NOTAM FILE TTF

COPTER

**Rwy 03-21:** H4997X100 (ASPH) S-60, D-80 MIRL

L-28J

**Rwy 03:** VASI(V2L)—GA 4.0° TCH 49'. Trees.

IAP

**Rwy 21:** REIL. PAPI(P2L)—GA 3.5° TCH 42'. Trees.

**AIRPORT REMARKS:** Attended 1300Z±-dusk. ACTIVATE MIRL Rwy 03-21, REIL Rwy 21, VASI Rwy 03 and PAPI Rwy 21—CTAF.

**WEATHER DATA SOURCES:** AWOS-3 119.075 (734) 384-0259.

**COMMUNICATIONS:** CTAF/UNICOM 122.7

**CARLETON RCO** 122.1R 115.7T (LANSING RADIO)

® **DETROIT APP/DEP CON** 134.3

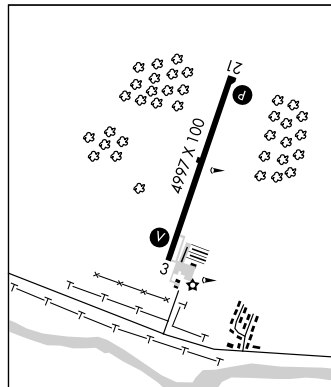
**GCO** 121.725 (DETROIT METRO CLNC and FLIGHT SERVICES)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE LAN.

**CARLETON (H) VORTAC** 115.7 CRL Chan 104 N42°02.88'

W83°27.45' 174° 6.6 NM to fld. 629/3W.

HIWAS.



**MOORESTOWN AIRPARK** (6YØ) 1 SE UTC-5(-4DT) N44°27.75' W84°59.75'

LAKE HURON

1213 NOTAM FILE LAN

**Rwy 03-21:** 2797X100 (TURF)

**Rwy 03:** Thld dsplcd 799'. Tree.

**Rwy 21:** Thld dsplcd 998'. Trees.

**Rwy 09-27:** 2599X100 (TURF)

**Rwy 09:** Thld dsplcd 399'. Trees.

**Rwy 27:** Thld dsplcd 429'. Road.

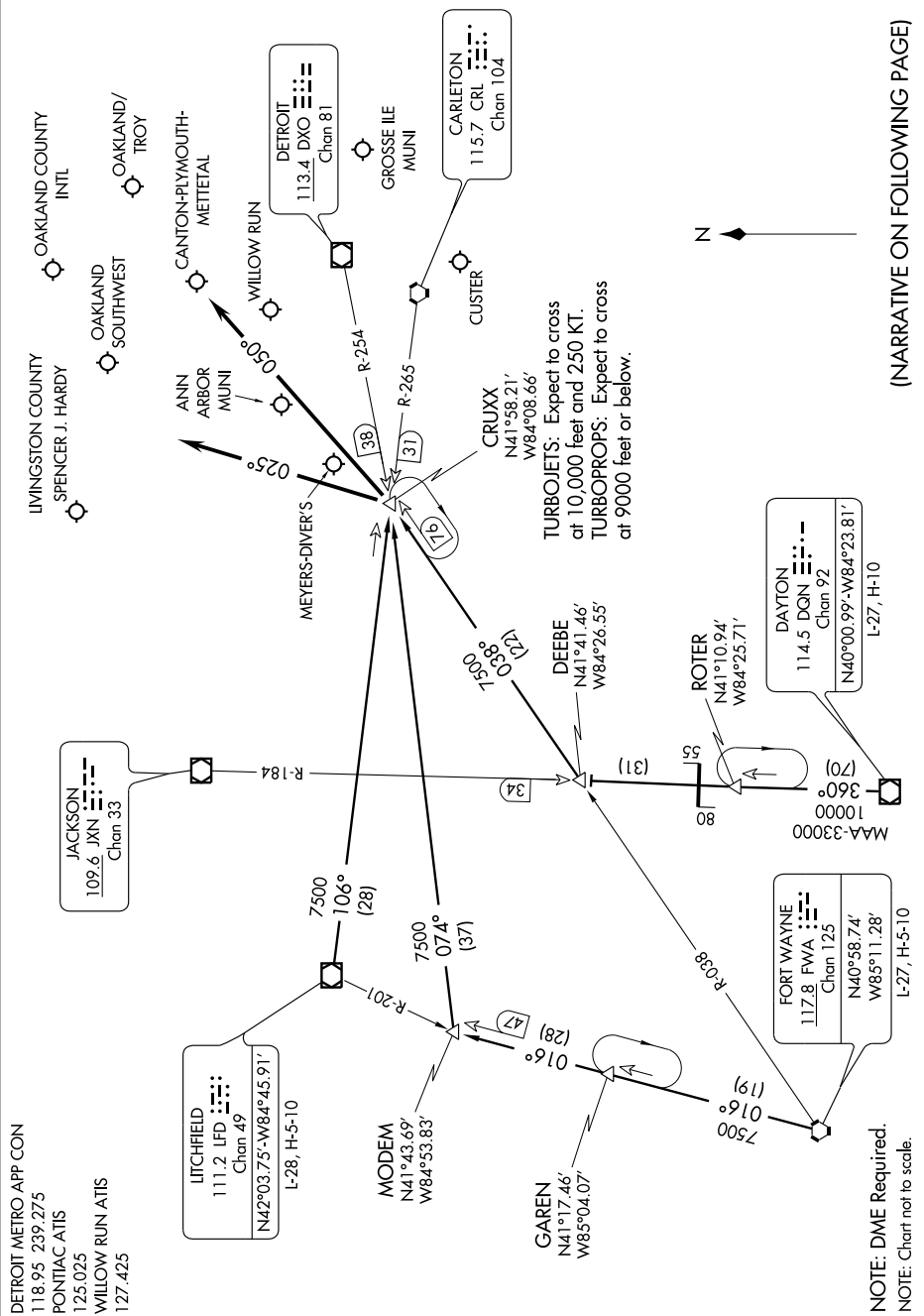
**AIRPORT REMARKS:** Attended Apr-Nov dawn-dusk. No snow removal in winter. Open winter months to ski equipped acft only. Rwy 03-21 marked with 3' yellow cones. Rwy 09-27 marked with 3' yellow cones.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

## CRUXX FOUR ARRIVAL

DETROIT, MICHIGAN

EC-1, 23 SEP 2010 to 21 OCT 2010



## CRUXX FOUR ARRIVAL

(CRUXX.CRUXX4) 10210

DETROIT, MICHIGAN

EC-1, 23 SEP 2010 to 21 OCT 2010

## CRUXX FOUR ARRIVAL (CRUXX.CRUX4)

DETROIT, MICHIGAN

## ARRIVAL DESCRIPTION

DAYTON TRANSITION (DQN.CRUX4): From over DQN VOR/DME via DQN R-360 and JXN R-184 to DEEBE INT and FWA R-038 to CRUXX INT. Thence . . . .

FORT WAYNE TRANSITION (FWA.CRUX4): From over FWA VORTAC via FWA R-016 to MODEM INT and DXO R-254 to CRUXX INT. Thence . . . .

LITCHFIELD TRANSITION (LFD.CRUX4): From over LFD VORTAC via LFD R-106 to CRUXX INT. Thence . . . .

. . . . Aircraft landing Y47, PTK, 0MI7, ØZW, ONZ, 1D2, TTF, VLL: From over CRUXX INT via 025° heading.

. . . . Aircraft landing YIP or ARB: From over CRUXX INT via 050° heading. Expect radar vector to final approach course.

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010



APP CRS <b>027°</b>	Rwy Idg TDZE Apt Elev	<b>4997</b> <b>614</b> <b>616</b>
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**RNAV (GPS) RWY 3**

MONROE/CUSTER (TTF)

▼ When local altimeter setting not received, use Detroit Metropolitan Wayne County altimeter setting and increase all MDA 60 feet, LNAV Cat C/D visibility ¼ mile, and Circling Cat C visibility ¼ mile. Visibility reduction by helicopters NA. DME/DME RNP-0.3 NA.

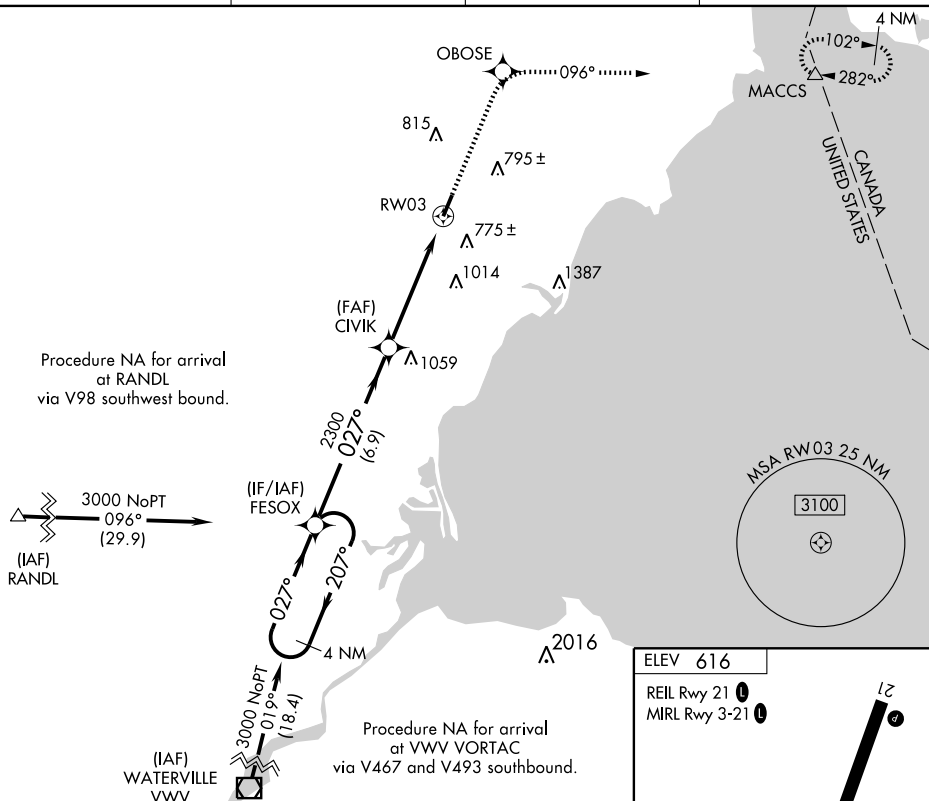
MISSED APPROACH: Climb to 3000 direct OBOSE and via 096° track to MACCS and hold.

AWOS-3  
**119.075**

DETROIT APP CON  
**134.3 363.2**

GCO  
**121.725**

UNICOM  
**122.7 (CTAF)**



ELEV 616

REIL Rwy 21 **1**

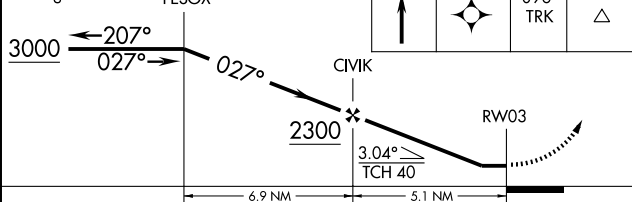
MIRL Rwy 3-21 **1**

4 NM Holding Pattern FESOX

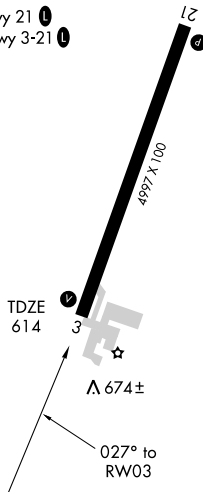
VGSI and descent angles not coincident.

3000 OBOSE MACCS

096° TRK



CATEGORY	A	B	C	D
LNAV MDA	1100-1	486 (500-1)	1100-1½ 486 (500-1½)	1100-1½ 486 (500-1½)
CIRCLING	1120-1 504 (600-1)	1180-1 564 (600-1)	1180-1½ 564 (600-1½)	1180-2 564 (600-2)



WAAS CH <b>86707</b> <b>W21A</b>	APP CRS <b>208°</b>	Rwy ldg TDZE Apt Elev <b>4997</b> <b>616</b> <b>616</b>
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## RNAV (GPS) RWY 21

MONROE/CUSTER (TTF)

**⚠** When local altimeter setting not received, use Detroit Metropolitan Wayne County altimeter setting and increase LPV DA 43 feet and all visibilities  $\frac{1}{4}$  mile, LNAV/VNAV DA 138 feet and all visibilities  $\frac{1}{2}$  mile and all MDA 60 feet and Cat C visibilities  $\frac{1}{4}$  mile. Baro-VNAV and VDP NA when using Detroit Metropolitan Wayne County altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA.

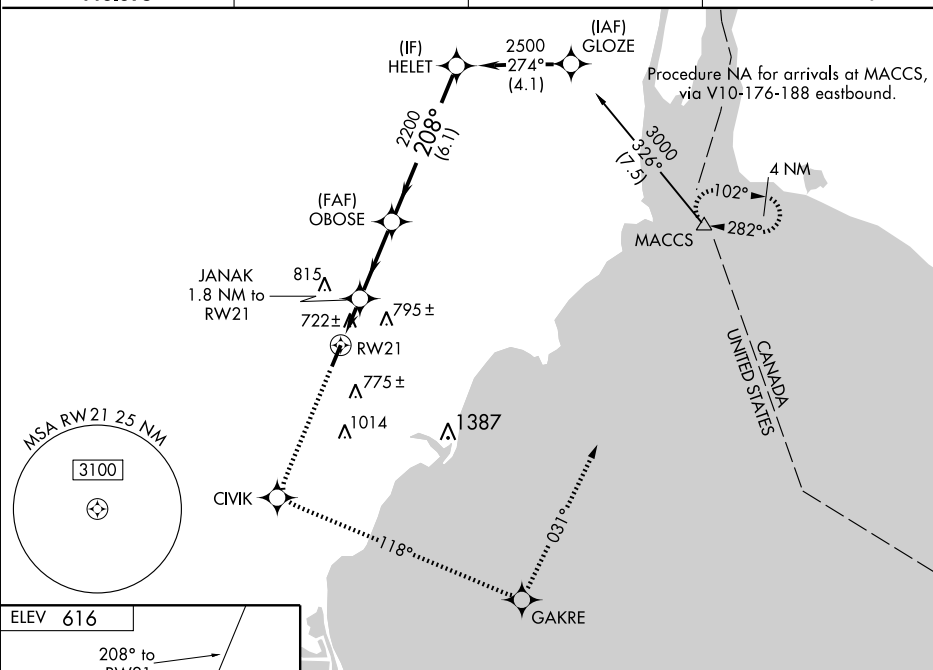
**MISSED APPROACH:**  
Climb to 3000 direct CIVIK and via 118° track to GAKRE and via 031° track to MACCS and hold.

AWOS-3  
**119.075**

DETROIT APP CON  
**134.3 363.2**

GCO  
**121.725**

UNICOM  
**122.7 (CTAF) ①**



ELEV 616

208° to RWY 21

730±

TDZE 616

4997 x 100

REIL Rwy 21 ①

MIRL Rwy 3-21 ①

△ 674±

3000	CIVIK	GAKRE	MACCS	VGSI and RNAV glidepath not coincident.	HELET
↑	118° TRK	031° TRK	△		
*LNAV only.					
	RWY 21 to RWY 21	JANAK 1.8 NM to RWY 21			
	*0.9 NM	*1.220			
	0.9 NM	0.9 NM	3 NM	6.1 NM	
CATEGORY	A	B	C	D	
LPV DA	966-1 $\frac{1}{4}$ 350 (400-1 $\frac{1}{4}$ )				
LNAV/VNAV DA	1009-1 $\frac{1}{2}$ 393 (400-1 $\frac{1}{2}$ )				
LNAV MDA	980-1 364 (400-1)				980-1 $\frac{1}{4}$ 364 (400-1 $\frac{1}{4}$ )
CIRCLING	1120-1 504 (600-1)	1180-1 564 (600-1)	1180-1 $\frac{1}{2}$ 564 (600-1 $\frac{1}{2}$ )	1180-2 564 (600-1)	

(SPRTN.SPRTN3) 10210

ST-118 (FAA)

## SPRTN THREE ARRIVAL

DETROIT, MICHIGAN

DETROIT APP CON

127.5 239.275

WILLOW RUN ATIS 127.425

PONTIAC ATIS 125.025

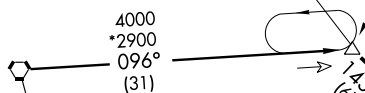
COLEMAN A. YOUNG ATIS 124.875

WINDSOR ATIS 134.5

SELFRIAGE ATIS 125.325 270.1

SPRTN

N42°42.52'-W84°00.23'

VERTICAL NAVIGATION  
PLANNING INFORMATIONTURBOJETS/TURBOPROPS:  
Expect clearance to cross at  
9000'.LIVINGSTON COUNTY  
SPENCER J. HARDYPARKY  
N42°38.16'  
W83°54.57'

ANN ARBOR MUNI

MEYERS-DIVER'S

FLINT  
116.9 FNT  
Chan 116PONTIAC  
111.0 PSI  
Chan 47

ROMEO STATE

OAKLAND COUNTY  
INTLSELFRIAGE  
ANG BASEOAKLAND/  
TROYCOLEMAN A.  
YOUNG MUNICANTON-  
PLYMOUTH-  
METTETAL

WINDSOR

GROSSE ILE  
MUNI

CLUSTER

NOTE: This Star for use at  
or above 9,000'.

NOTE: Chart not to scale.

EC-1, 23 SEP 2010 to 21 OCT 2010

LANSING TRANSITION (LAN.SPRTN3): From over LAN VORTAC via LAN R-096  
to SPRTN INT. Thence . . . .. . . . Aircraft landing: DET, PTK, VLL, D98, MTC, ARB, YIP, ONZ,  
1D2, TTF, Y47, 36MI, OZW, 3TE, YQG: From over SPRTN INT via DXO R-323  
to PARKY INT. Thence . . . .

. . . . Expect radar vectors to final approach course.

## SPRTN THREE ARRIVAL

DETROIT, MICHIGAN

(SPRTN.SPRTN3) 10210

EC-1, 23 SEP 2010 to 21 OCT 2010

VOR/DME DXO <b>113.4</b> Chn <b>81</b>	APP CRS <b>017°</b>	Rwy Idg <b>4997</b> TDZE <b>614</b> Apt Elev <b>616</b>
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VOR RWY 3  
MONROE/CUSTER (TTF)

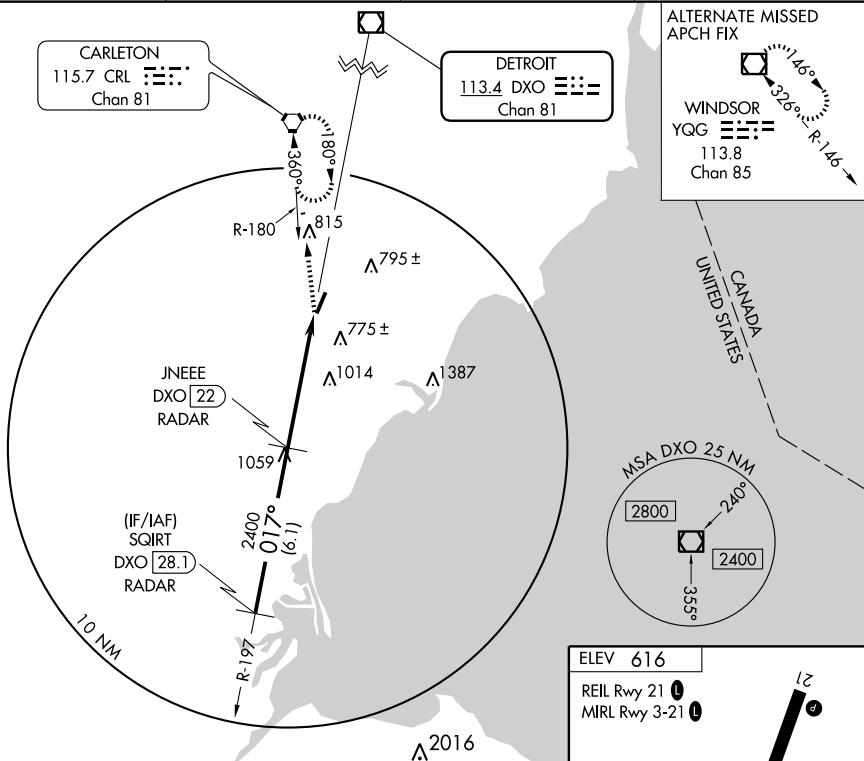
**T** DME or RADAR required. When local altimeter setting not received, use Detroit Metropolitan Wayne County altimeter setting and increase all MDAs 60 feet, and increase Cat C and D visibility  $\frac{1}{4}$  mile.

**MISSED APPROACH:** Climb to 3000  
direct CRL VORTAC and hold.

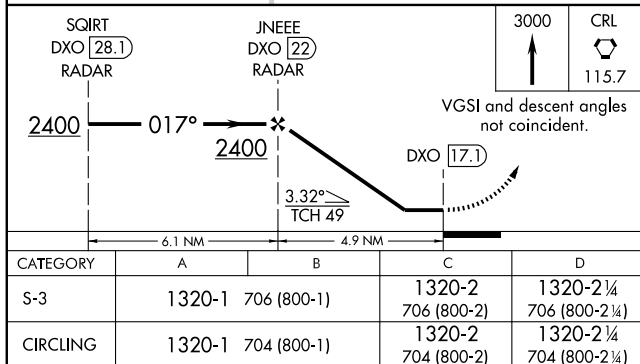
AWOS-3  
119.075

DETROIT APP CON  
134.3 363.2

GCO  
121.725

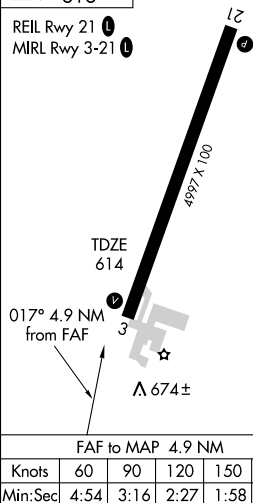
UNICOM  
122.7 (CTAF) **L**

## RADAR REQUIRED



ELEV 616

REIL Rwy 21 **L**  
MIRL Rwy 3-21 **L**



MONROE, MICHIGAN

Amdt 2 08213

MONROE/ CUSTER (TTF)

VOR RWY 3

41°56'N - 83°26'W

EC-1. 23 SEP 2010 to 21 OCT 2010

**EC-1, 23 SEP 2010 to 21 OCT 2010**

VOR/DME DXO  
**113.4**  
Chan **81**

APP CRS  
**196°**

Rwy Idg  
TDZE  
Apt Elev

**4997**  
**616**  
**616**

**VOR RWY 21**  
MONROE/CUSTER (TTF)

When local altimeter setting not received, use Detroit Metropolitan Wayne County altimeter setting and increase all MDA 60 feet, and increase Cat C and D visibility ¼ mile. VDP NA when using Detroit Metropolitan Wayne County altimeter setting.

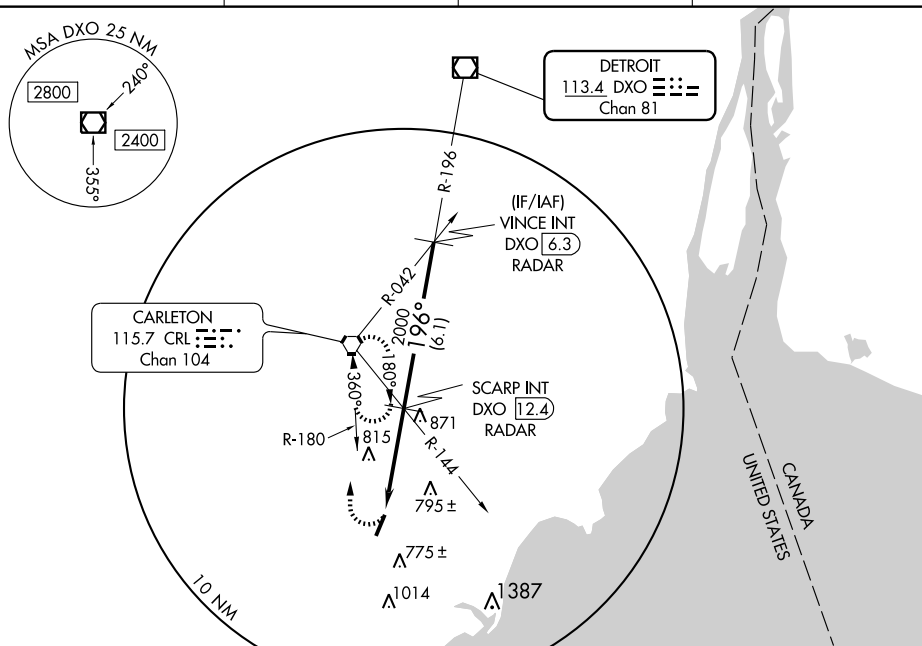
MISSED APPROACH: Climbing right turn to 2600 direct CRL VORTAC and hold.

AWOS-3  
**119.075**

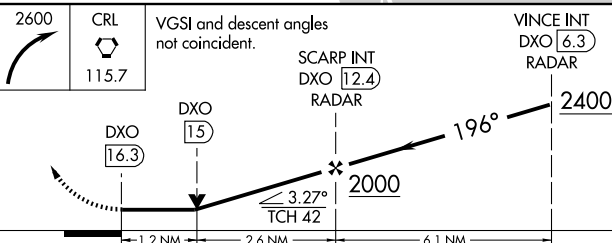
DETROIT APP CON  
**134.3 363.2**

GCO  
**121.725**

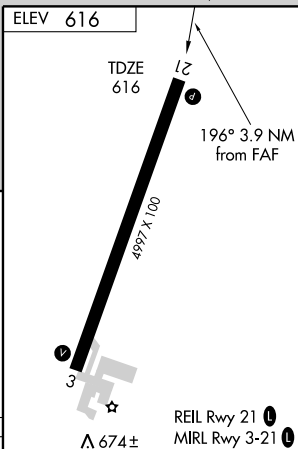
UNICOM  
**122.7** (CTAF) **0**



## RADAR REQUIRED



CATEGORY	A	B	C	D
S-21	1120-1	504 (600-1)	1120-1½	504 (600-1½)
CIRCLING	1120-1 504 (600-1)	1180-1 564 (600-1)	1180-1½ 564 (600-1½)	1180-2 564 (600-2)



CATEGORY	A	B	C	D
S-21	1120-1	504 (600-1)	1120-1½	504 (600-1½)
CIRCLING	1120-1 504 (600-1)	1180-1 564 (600-1)	1180-1½ 564 (600-1½)	1180-2 564 (600-2)

**MOUNT PLEASANT MUNI** (MOP) 2 NE UTC-5(-4DT) N43°37.30' W84°44.24'

755 B S4 FUEL 100LL, JET A NOTAM FILE MOP

RWY 09-27: H5001X100 (ASPH) S-50, D-65, 2S-82, 2D-118 MIRL

RWY 09: Trees. RWY 27: REIL. PAPI(P4L)—GA 3.0° TCH 35'.

RWY 05-23: 2500X160 (TURF)

RWY 05: Tree. RWY 23: Trees.

**AIRPORT REMARKS:** Attended 1300Z±-dusk. Fuel 24 hour major credit card self svc. Deer and birds on and in/ovf arpt. Parachute Jumping. Rwy 27 noise abatement: climb to 1500' AGL before turning over city. Rwy 05-23 marked with 3' yellow cones.

ACTIVATE MIRL Rwy 09-27, REIL Rwy 27 and PAPI Rwy 27—CTAF.

**WEATHER DATA SOURCES:** AWOS-3 110.6 MOP (989) 773-2885.**COMMUNICATIONS:** CTAF/UNICOM 123.0

RCO 122.6 (LANSING RADIO)

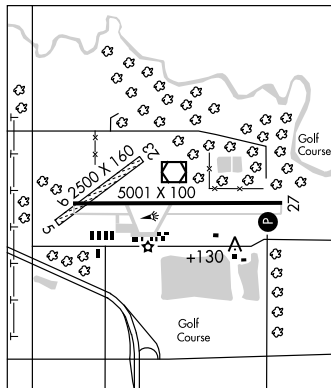
⑧ **SAGINAW APP/DEP CON** 126.45 (1100-0400Z±)**CLEVELAND CENTER APP/DEP CON** 127.7 (0400-1100Z±)**RADIO AIDS TO NAVIGATION:** NOTAM FILE LAN.(L) **VORW/DME** 110.6 MOP Chan 43 N43°37.37'W84°44.24' at fld. 752/5W. **AWOS-3.**

DME portion unusable byd 33 NM blo 4000'.

**DETROIT**

H-2L, 10F, L-28J

IAP

**MUNISING****HANLEY FLD** (5Y7) 3 SE UTC-5(-4DT) N46°21.25' W86°37.26'**GREEN BAY**

984 B NOTAM FILE GRB

RWY 18-36: 4000X120 (TURF)

RWY 18: Trees. RWY 36: Trees.

**AIRPORT REMARKS:** Attended irregularly May-Nov. Arpt CLOSED Nov-May 14. Birds and deer on and in/ovf arpt. Rwy 18-36 marked with cones.

**COMMUNICATIONS:** CTAF 122.9

APP CRS **096°**  
 Rwy Idg **5001**  
 TDZE **755**  
 Apt Elev **755**

# RNAV (GPS) RWY 9

MOUNT PLEASANT MUNI (MOP)

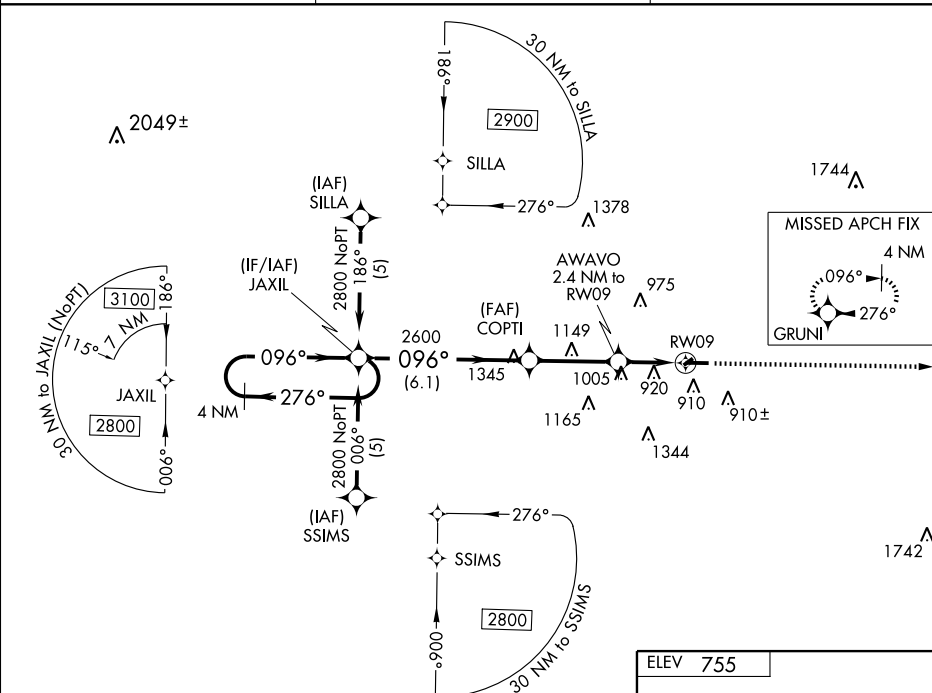
**▽** DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received use Alma altimeter setting and increase all MDA 60 feet, increase LNAV Cat C/D and Circling Cat C visibility ¼ mile.

MISSED APPROACH: Climb to 2800 direct GRUNI and hold.

AWOS-3  
**110.6**

SAGINAW APP CON ★  
**126.45 235.625**

UNICOM  
**123.0 (CTAF) 0**



4 NM  
 Holding Pattern

JAXIL

2800

276°

096°

096°

2600

COPTI

3.05°

TCH 40

AWAVO 2.4 NM to RW09

1540

2.4 NM

6.1 NM

3.2 NM

2800 GRUNI

096° to RW09

TDZE 755

2500 X 160

5001 X 100

27

CATEGORY	A	B	C	D
LNAV MDA	1320-1 565 (600-1)	1320-1½ 565 (600-1½)	1320-1¾ 565 (600-1¾)	1320-2 605 (700-2)
CIRCLING	1320-1 565 (600-1)	1320-1½ 565 (600-1½)	1320-1¾ 565 (600-1¾)	1320-2 605 (700-2)

ELEV 755

REIL Rwy 27 0  
 MIRL Rwy 9-27 0

WAAS CH <b>82613</b> <b>W27A</b>	APP CRS <b>276°</b>	Rwy Idg TDZE Apt Elev	<b>5001</b> <b>753</b> <b>755</b>
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# RNAV (GPS) RWY 27

MOUNT PLEASANT MUNI (MOP)

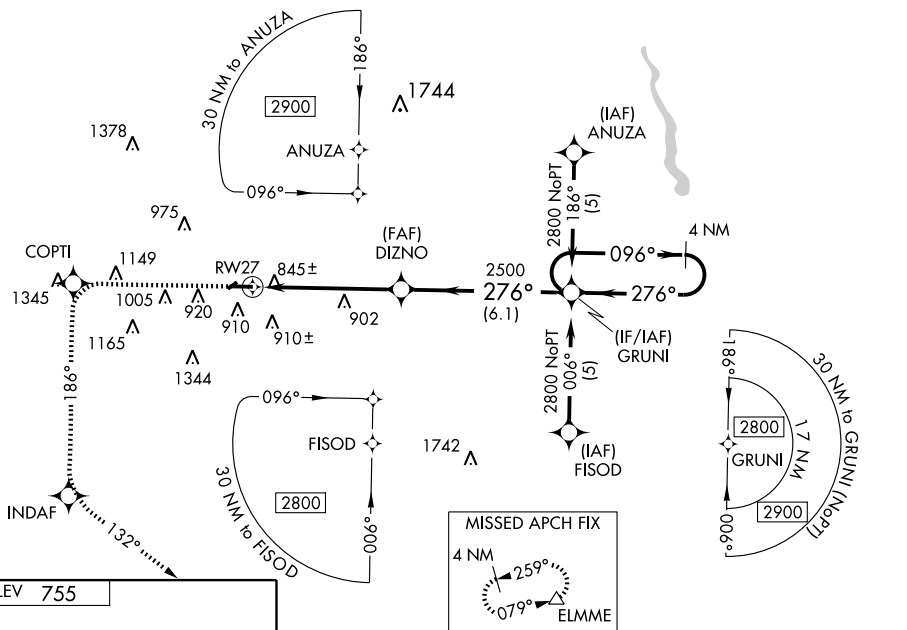
▼ For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Alma altimeter setting and increase all DA 42 feet and all MDA 60 feet, increase LPV, LNAV/VNAV all Cats, LNAV Cat D and Circling Cat C visibilities ¼ mile. Baro-VNAV and VDP NA when using Alma altimeter setting.

MISSED APPROACH: Climb to 3000 direct COPTI and via 186° track direct INDAP and via 132° track to ELMME and hold.

AWOS-3  
**110.6**

SAGINAW APP CON ★  
**126.45 235.625**

UNICOM  
**123.0 (CTAF) 0**



ELEV 755

3000	COPTI	INDAP	ELMME
↑	TRK 186°	TRK 132°	△

\*LNAV only

\*1.2 NM to RW27



1.2 NM	4.1 NM	6.1 NM	4 NM Holding Pattern
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CATEGORY	A	B	C	D
LPV DA	1099-1¼ 346 (400-1¼)			
LNAV/VNAV DA	1201-1½ 448 (500-1½)			
LNAV MDA	1160-1	407 (500-1)	1160-1¼	407 (500-1¼)
CIRCLING	1220-1	465 (500-1)	1320-1½ 565 (600-1½)	1360-2 605 (700-2)

REIL Rwy 27 0  
MIRL Rwy 9-27 0



VOR/DME MOP <b>110.6</b> Chan <b>43</b>	APP CRS <b>284°</b>	Rwy Idg TDZE Apt Elev	<b>5001</b> <b>753</b> <b>755</b>
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**VOR RWY 27**

MOUNT PLEASANT MUNI (MOP)

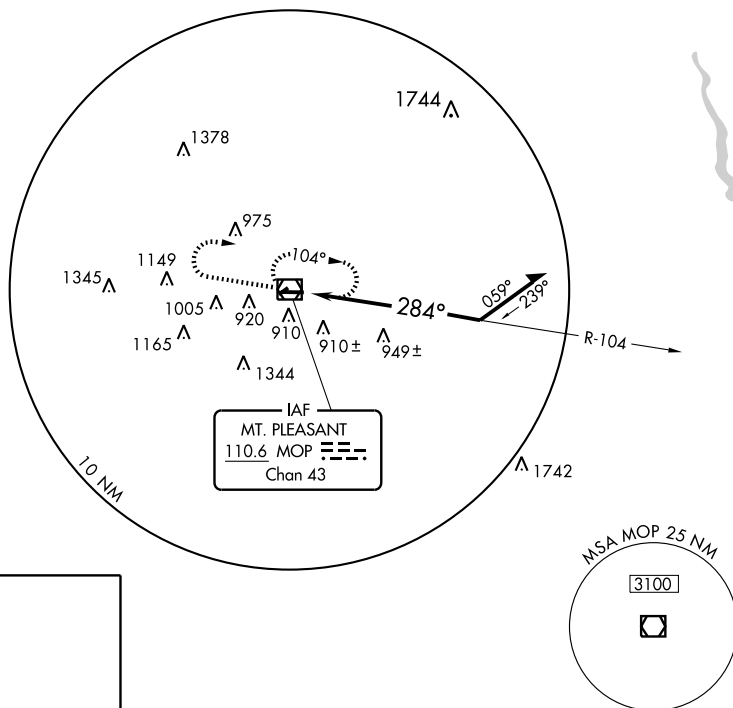
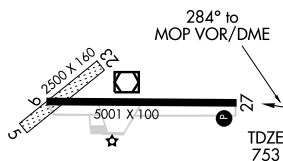
▼ Visibility reduction by helicopters NA. When local altimeter setting not received, use Alma altimeter setting and increase all MDA 60 feet, S-27 Cat D and Circling Cat C visibilities ¼ mile. VDP NA when using Alma altimeter setting.

MISSED APPROACH: Climb to 2400 then right turn direct MOP VOR/DME and hold.

AWOS-3  
**110.6**

SAGINAW APP CON ★  
**126.45 235.625**

UNICOM  
**123.0 (CTAF) 0**

ELEV **755**

2400



MOP

110.6

VOR/DME

6000

Remain  
within 10 NM

104°

2400

284°

MOP 2

0.5 1.5

CATEGORY

A

B

C

D

S-27

1260-1 507 (600-1)

1260-1½ 507 (600-1½)

CIRCLING

1260-1 505 (600-1)

1320-1½  
565 (600-1½)1360-2  
605 (700-2)

REIL Rwy 27 0  
MIRL Rwy 9-27 0

MOUNT PLEASANT, MICHIGAN

Amdt 1 09239

MOUNT PLEASANT MUNI (MOP)

43°37'N - 84°44'W

**VOR RWY 27**

## AIRPORT DIAGRAM

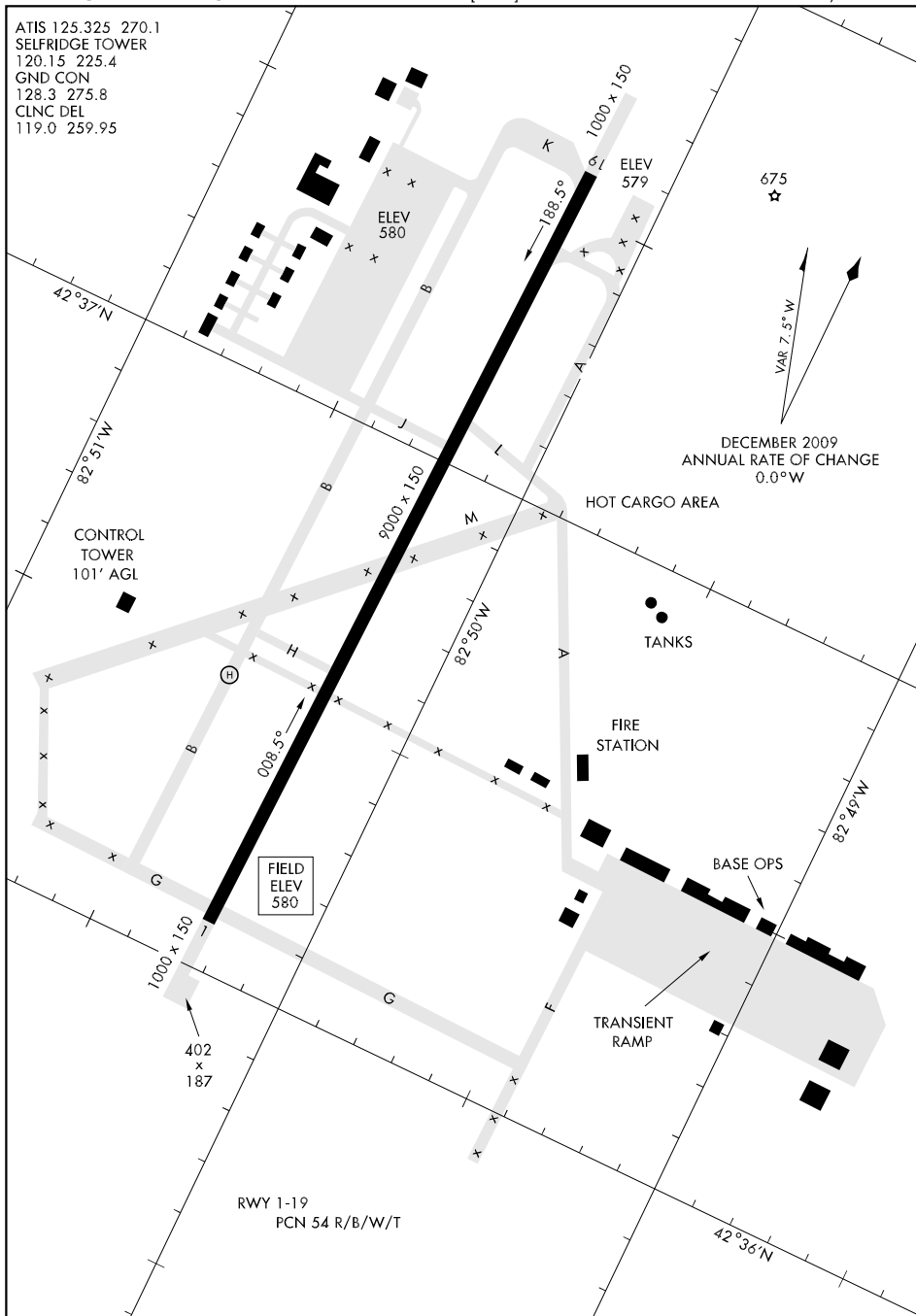
AFD-276 [USAF]

SELFRIIDGE ANGB (KMTC)

MT. CLEMENS, MICHIGAN

ATIS 125.325 270.1  
 SELFRIIDGE TOWER  
 120.15 225.4  
 GND CON  
 128.3 275.8  
 CLNC DEL  
 119.0 259.95

EC-1, 23 SEP 2010 to 21 OCT 2010



EC-1, 23 SEP 2010 to 21 OCT 2010

## AIRPORT DIAGRAM

MT. CLEMENS, MICHIGAN  
 SELFRIIDGE ANGB (KMTC)

**SEBEWAING** (98G) OW UTC-5(-4DT) N43°43.75' W83°27.75'

DETROIT

584 **FUEL** 100LL NOTAM FILE LAN

**Rwy 18-36:** H2178X50 (ASPH) S-10 LIRL

**Rwy 18:** Trees. **Rwy 36:** Thld dsplcd 245'. Railroad.

**Rwy 06-24:** 2150X130 (TURF)

**Rwy 06:** Brush. **Rwy 24:** Thld dsplcd 483'. Railroad.

**AIRPORT REMARKS:** Attended irregularly. For fuel call 989-883-3787 or 989-550-1145. Rwy 06-24 not plowed winter months, may be wet or unusable during spring thaw. Seagulls and deer on and invof rws. Rwy 06-24 marked with 3' cones. Rwy 18-36 numerous cracks, vegetation and deterioration. ACTIVATE LIRL Rwy 18-36—CTAF.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

**SELFPRIDGE ANGB** (MTC)(KMTCT) ANG (ARNG) 2 NE UTC-5(-4DT)

DETROIT

N42°36.50' W82°50.13'

COPTER

580 B TPA—See Remarks NOTAM FILE MTC Not insp.

H-106, L-28J, A

**Rwy 01-19:** H900X150 (PEM) S-85, D-220, 2D-380, 2D/2D2-800 PCN 54 R/B/W/T HIRL

DIAP, AD

**Rwy 01:** SALS. REIL. PAPI(P4R)—GA 3.0° TCH 52'. Rgt tfc.

**Rwy 19:** ALSF1. REIL. PAPI(P4R)—GA 3.0° TCH 52'. Rgt tfc.

**MILITARY SERVICE:** LGT When twr clsd ACTIVATE arpt lgt freq 120.15.

**JASU** 1(M32A-60) 1(A/M32A-86D) 1(MC-11) **FUEL** J8. Avbl Mon-Fri 1200-0300Z, Sat-Sun 1430-2100Z, closed holidays. **FLUID** SP PRESAIR LPOX LOX HPOX **OIL** O-128-133-148 SOAP. SOAP Mon-Fri 1215-2100Z, other times DSN 273-5777. **TRAN ALERT** Opr 1230-0130Z clsd hol. Ltd fleet scv avbl prior notice required ctc DSN 273-5640 or C586-239-5640.

**MILITARY REMARKS:** Opr 1230-0400Z, clsd hol. Other times uncontrolled for Department of Homeland Security, ARNG, USCG or emergency ops. See FLIP AP/1 Supplementary Arpt Remark. **RSTD** Hazardous cargo pad can accommodate C130 and ltd C17 use. No tie downs on pad. No long term parking that location. Helipad on Twy B day VFR only. PPR all acft, DSN 273-5322/4402. **CAUTION** Moderate bird activity common. Twy B btn Twy H and 500' north of Twy J not visible from twr. **TFC PAT** TPA—Fighter rectangular and clsd 2200(1620), all others 1700(1120). **MISC** VIP acft ctc PTD 30 minutes prior to arrival with firm chock time. Base OPS DSN 273-5322, C586-307-5322, fax DSN 273-5814, C586-239-5814; NOTAM DSN 273-4069, C586-239-4069. Snow removal accomplished 1215-2100Z weekdays. Tran acft req use of Selfridge ANGB Drop Zones (DZs). Rwy 01-19 transversely grooved. Rwy 01-19 S 1500' concrete, center 5700' asphalt, N 1800' concrete. Rwy 01-19 S overrun hardened may be used for tkf, day VFR condition only.

**COMMUNICATIONS:** ATIS 125.325 270.1 PTD 134.85 372.2

Ⓡ **APP CON** 119.6 318.2 (1230-0400Z), clsd hol, other times uncontrolled for DHS, ARNG, USCG or emergency ops, other times ctc Ⓡ **CLEVELAND CENTER APP CON** 127.7 308.7.

**TOWER** 120.15 225.4 **GND CON** 128.3 275.8 **CLNC DEL** 119.0 259.95

Ⓡ **DEP CON** 119.6 391.9 (1230-0400Z), clsd hol, other times uncontrolled for DHS, ARNG, USCG or emergency ops, other times ctc

**CLEVELAND CENTER DEP CON** 127.7 290.425.

**PSMV METRO** 342.5 (Full svc avbl 1000-0400Z, clsd hol.)

**WING COMD POST** (QUARTERBACK Control) 311.0 321.0

**SELFPRIDGE** 120.15 **USCG DETROIT AIR** 381.8X 5692X

**AIRSPACE:** CLASS D svc continuous.

**RADIO AIDS TO NAVIGATION:** NOTAM FILE MTC.

(L) **TACAN** Chan 64 MTC (133.7) N42°36.78' W82°49.91' at fld. 580/6W. No NOTAM MP Thu 1300-1500Z (1500/3).

TACAN unusable:

020-345° byd 20 NM blo 3,000'

345°-020° byd 30 NM blo 3,000'

**ILS** 110.1 I-RFB Rwy 01. ILS BC unusable. No NOTAM MP ILS Tue 1300-1500Z (1500/3), Glide Slope Wed 1300-1700Z (1500/3).

**ILS** 110.1 I-MTC Rwy 19. ILS BC unusable. No NOTAM MP ILS Tue 1300-1500Z (1500/3), Glide Slope Wed 1300-1700Z (1500/3).

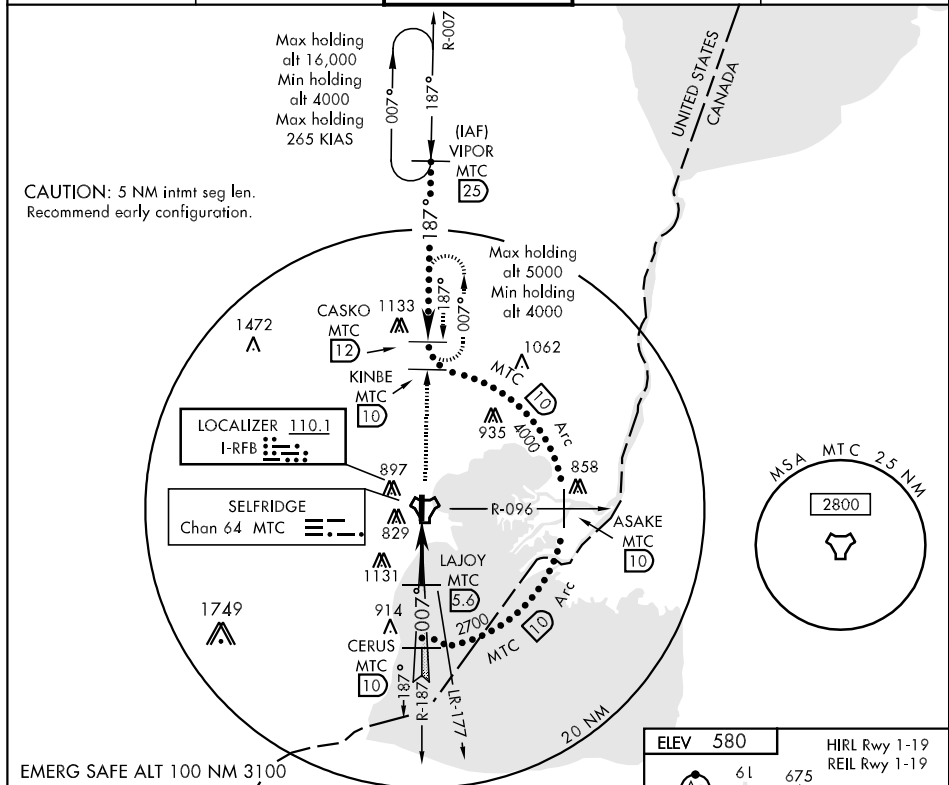
**COMM/NAV/WEATHER REMARKS:** VFR ARR contact Selfridge App Con 30 NM out 119.6 318.2.

**SHAMROCK FLD** (See BROOKLYN)

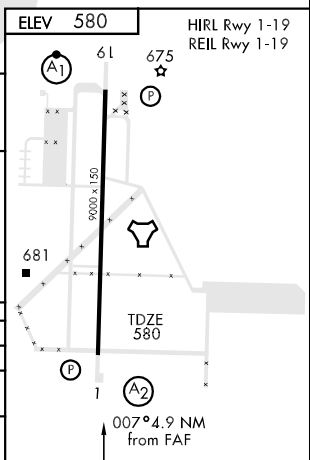
**SHARPE'S STRIP** (See EMMETT)

LOC I-RFB <b>110.1</b>	APCH CRS <b>007°</b>	Rwy ldg <b>9000</b> TDZE <b>580</b> Arpt Elev <b>580</b>	JAL-276 [USAF]	SELFDRIDGE ANGB (KMTCT)
<b>▼</b> *When ALS inop, increase CAT C RVR to 60 and vis to 1¼ miles, CAT D vis to 1½ miles, CAT E vis to 1¾ miles. <b>**</b> Circling not authorized W of Rwy 1-19.			SALS <b>(A2)</b>	MISSED APPROACH: Climb to 4000, intercept MTC R-007 to CASKO and hold, continue climb-in-hold to 4000.

ATIS <b>125.325 270.1</b>	SELFDRIDGE APP CON <b>119.6 318.2</b>	SELFDRIDGE TOWER <b>120.15 225.4</b>	GND CON <b>128.3 275.8</b>	CLNC DEL <b>119.0 259.95</b>
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VIPOR R-007 25	KINBE R-096 10	ASAKE R-096 10	CERUS R-096 10	LAJOY MTC 5.6	CASKO MTC R-007
16,000	4000	2700	2200	2200	4000
GS 3.00° TCH 32	10 Arc	10 Arc	10 Arc	10 Arc	10 Arc
4.9 NM					
CATEGORY	C	D	E		
S-ILS/DME 1	780/40		200 (200-34)		
S-LOC/DME 1	1060/50 480 (500-1)		1060/60 480 (500-1¼)	1060-1½ 480 (500-1½)	
CIRCLING **	1140-1½ 560 (600-1½)		1160-2 580 (600-2)	1200-2¼ 620 (700-2¼)	

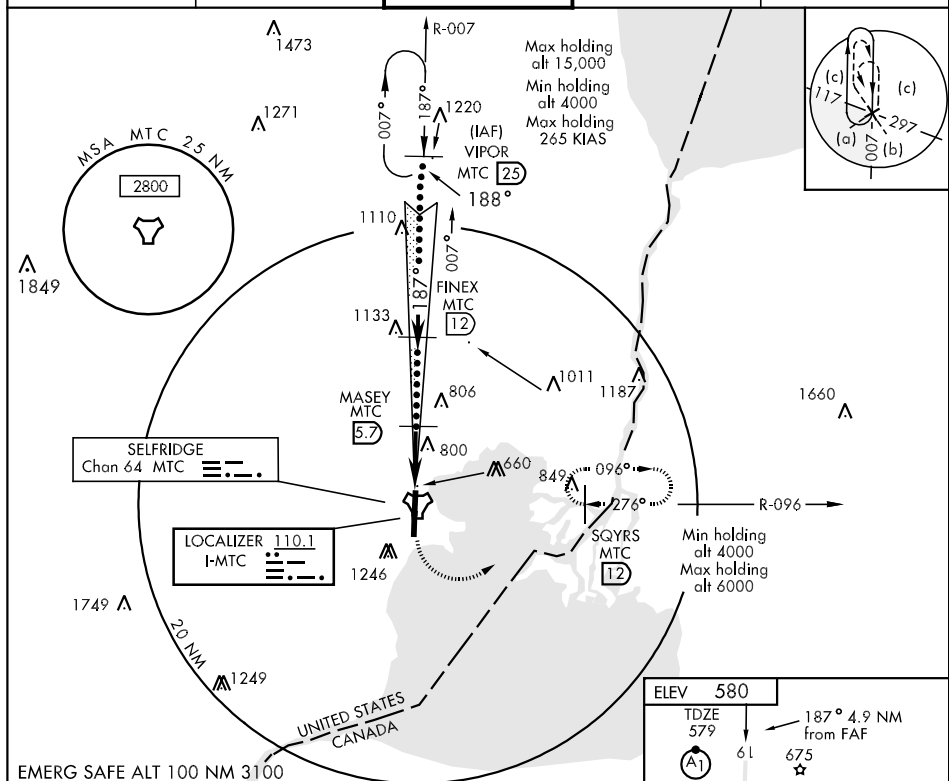


LOC I-MTC <b>110.1</b>	APCH CRS <b>187°</b>	Rwy Idg <b>9000</b> TDZE <b>579</b> Arpt Elev <b>580</b>	JAL-276 [USAF]	SELFRIDGE ANGB (KMTCT)
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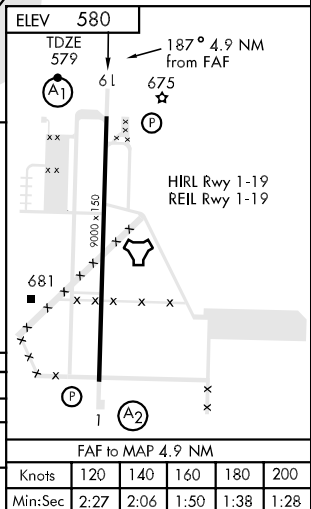
**T** \* When ALS inop, increase RVR to 50 and vis to 1 mile.  
 \*\* When ALS inop, increase CAT CD vis to 1½ miles, CAT E vis to 1¾ miles.  
 \*\*\* Circling not authorized W of Rwy 1-19.

ALSF-1 	<b>MISSED APPROACH:</b> Climbing left turn to 4000, intercept MTC R-096 to SQYRS and hold, continue climb-in-hold to 4000..
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ATIS	SELFEDGE APP CON	SELFEDGE TOWER	GND CON	CLNC DEL
125.325 270.1	119.6 318.2	120.15 225.4	128.3 275.8	119.0 259.95



CATEGORY	C	D	E
S-ILS 19 *	882/40	303 (400-¾)	
S-LOC 19 **	1080/50	501 (500-1)	1080/60 501 (500-1¼)
***	1140-1½ 560 (600-1½)	1160-2 580 (600-2)	1200-2½ 620 (700-2½)



TACAN MTC Chan <b>64</b>	APCH CRS <b>018°</b>	Rwy ldg <b>9000</b> TDZE <b>580</b> Arpt Elev <b>580</b>
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JAL-276 [USAF]

SELFDRIDGE ANGB (KMTCT)

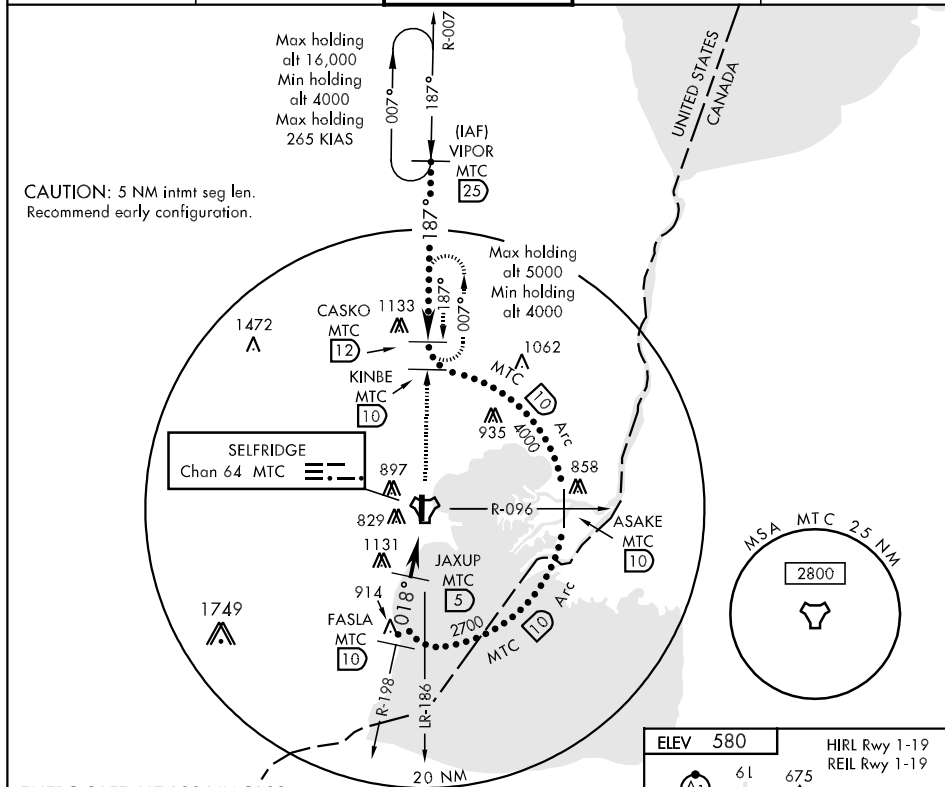
▼ \*When ALS inop, increase CAT C vis to 1½ miles, CAT D vis to 1¾ miles, CAT E vis to 2 miles.  
 \*\*Circling not authorized W of Rwy 1-19.

SALS

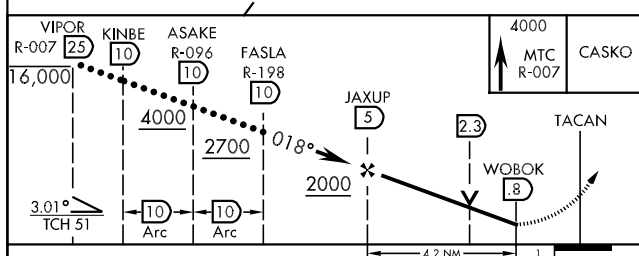


MISSED APPROACH: Climb to 4000 and intercept MTC R-007 to CASKO and hold, continue climb-in-hold to 4000.

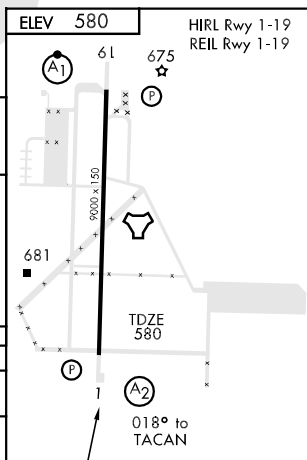
ATIS <b>125.325 270.1</b>	SELFDRIDGE APP CON <b>119.6 318.2</b>	SELFDRIDGE TOWER <b>120.15 225.4</b>	GND CON <b>128.3 275.8</b>	CLNC DEL <b>119.0 259.95</b>
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EMERG SAFE ALT 100 NM 3100



CATEGORY	C	D	E
S-1*	1140/60 560 (600-1¼)	1140-1½ 560 (600-1½)	1140-1¾ 560 (600-1¾)
CIRCLING**	1140-1½ 560 (600-1½)	1160-2 580 (600-2)	1200-2¼ 620 (700-2¼)



TACAN	MTC	APCH CRS	Rwy ldg	9000
Chan 64	177°	TDZE	579	
		Arprt Elev	580	

JAL-276 [USAF]

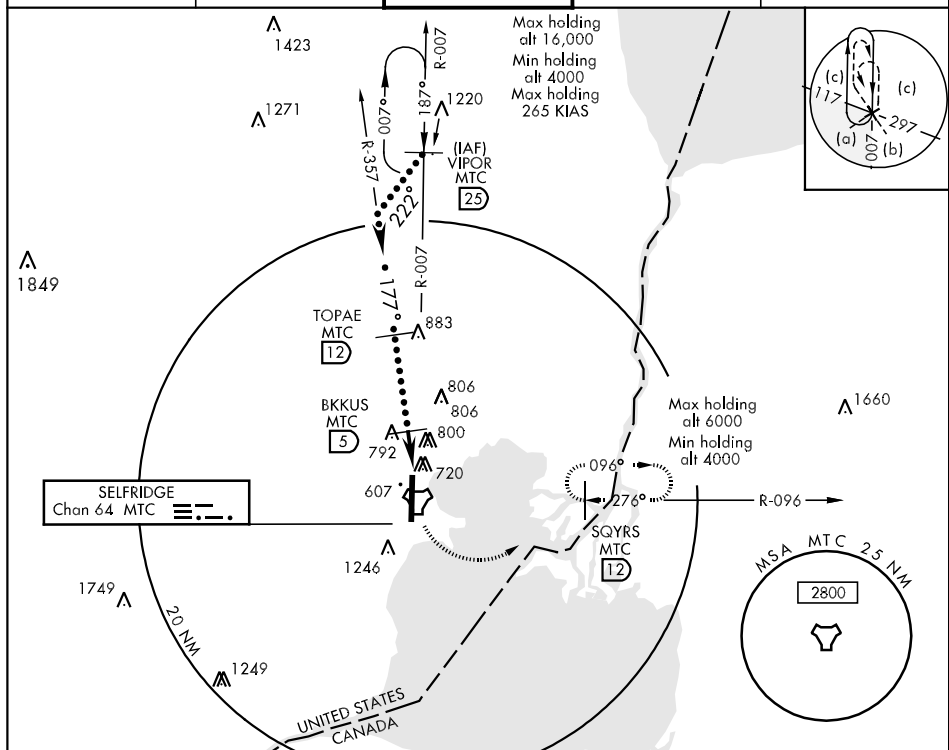
SELFIDGE ANGB (KMTCT)

▼ \* When ALS inop, increase CAT C vis to 1¾ miles,  
CAT D vis to 2 miles, CAT E vis to 2¼ miles.  
\*\* Circling not authorized W of Rwy 1-19.

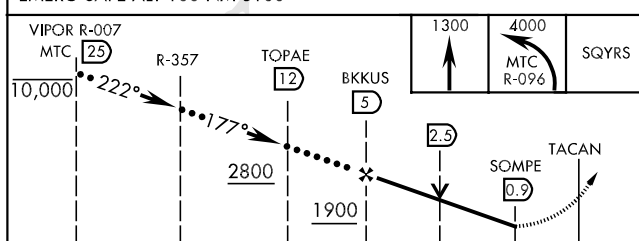


MISSED APPROACH: Climb to 1300 then climbing  
left turn to 4000, intercept MTC TACAN R-096 to SQYRS  
and hold, continue climb-in-hold to 4000.

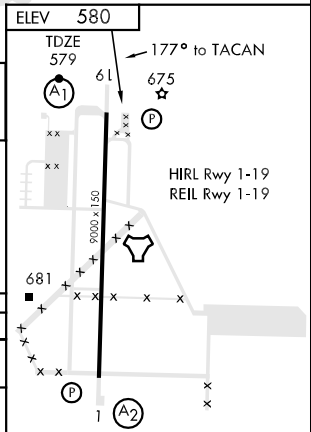
ATIS 125.325 270.1	SELFIDGE APP CON 119.6 318.2	SELFIDGE TOWER 120.15 225.4	GND CON 128.3 275.8	CLNC DEL 119.0 259.95
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EMERG SAFE ALT 100 NM 3100



CATEGORY	C	D	E
S-19 *	1180/60 601 (600-1¼)	1180-1½ 601 (600-1½)	1180-1¾ 601 (600-1¾)
CIRCLING **	1180-1¾ 600 (600-1¾)	1180-2 600 (600-2)	1200-2¼ 620 (700-2¼)



LOC I-RFB <b>110.1</b>	APCH CRS <b>007°</b>	Rwy Idg TDZE Arpt Elev <b>9000</b> <b>580</b> <b>580</b>
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AL-276 [USAF]

SELFRIDGE ANGB (KMTCT)

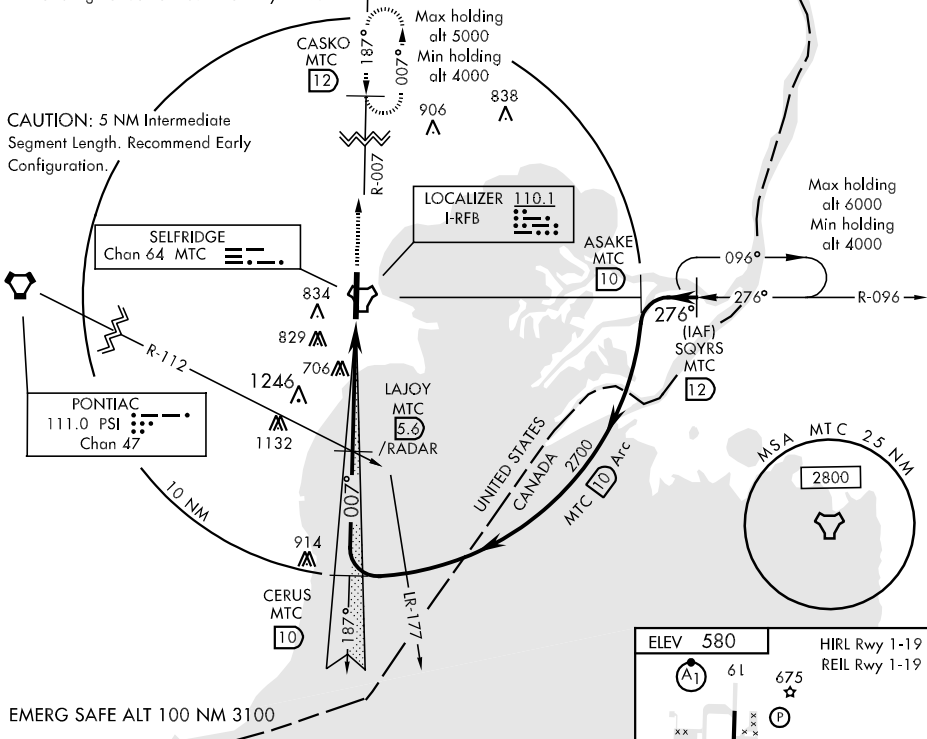
▼\*When ALS inop, increase CAT AB RVR to 40 and vis to  $\frac{3}{4}$  mile.  
 \*\*When ALS inop, increase CAT AB RVR to 50 and vis to 1 mile, CAT C RVR to 60 and vis to  $1\frac{1}{4}$  mile, CAT D vis to  $1\frac{1}{2}$ , CAT E vis to  $1\frac{3}{4}$ .

SALS  
A2

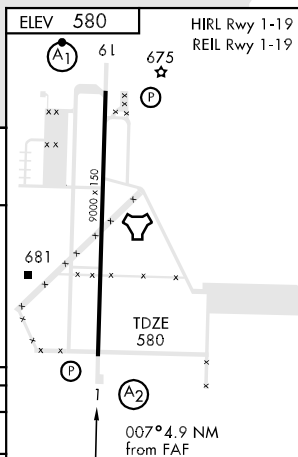
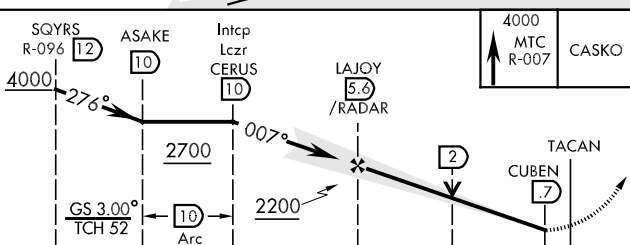
MISSED APPROACH: Climb to 4000, intercept MTC R-007 to CASKO and hold, continue climb-in-hold to 4000.

ATIS <b>125.325 270.1</b>	SELFRIDGE APP CON <b>119.6 318.2</b>	SELFRIDGE TOWER <b>120.15 225.4</b>	GND CON <b>128.3 275.8</b>	CLNC DEL <b>119.0 259.95</b>
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\*\*\* Circling not authorized W of Rwy 1-19.



EMERG SAFE ALT 100 NM 3100



CATEGORY	A	B	C	D	E
S-ILS 01*	780/24	200 (200- $\frac{1}{2}$ )	780/40	200 (200- $\frac{3}{4}$ )	
S-LOC 01**	1060/40	480 (500- $\frac{3}{4}$ )	1060/50 480 (500-1)	1060/60 480 (500- $\frac{1}{4}$ )	1060- $1\frac{1}{2}$ 480 (500- $\frac{1}{2}$ )
CIRCLING***	1140-1	560 (600-1)	1140- $1\frac{1}{2}$ 560 (600- $\frac{1}{2}$ )	1160-2 580 (600-2)	1200-2 $\frac{1}{4}$ 620 (700-2 $\frac{1}{4}$ )

FAF to MAP 4.9 NM					
Knots	60	90	120	150	180
Min:Sec	4:54	3:16	2:27	1:58	1:36



LOC I-MTC <b>110.1</b>	APCH CRS <b>187°</b>	Rwy Idg TDZE Arpt Elev <b>9000</b> <b>579</b> <b>580</b>	AL-276 [USAF]	SELFRIDGE ANGB (KMTC)
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▼ \* When ALS inop, increase RVR to 50 and vis to 1 mile.



MISSED APPROACH: Climbing left turn to 4000, intercept MTC TACAN R-096 to SQYRS and hold, continue climb-in-hold to 4000.

ATIS  
**125.325 270.1**

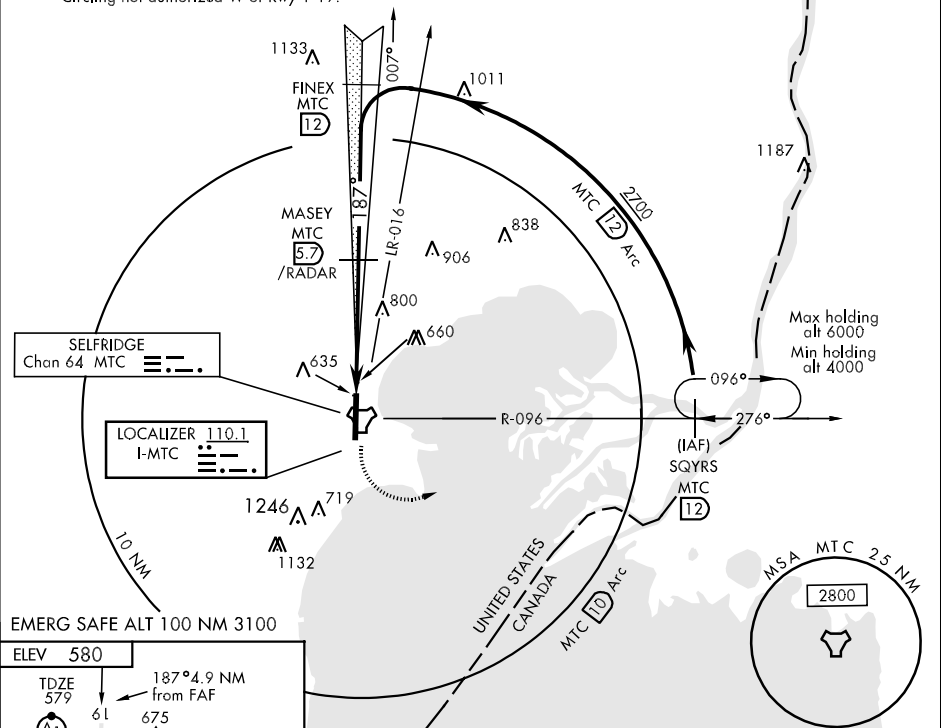
SELFRIDGE APP CON  
**119.6 318.2**

SELFRIDGE TOWER  
**120.15 225.4**

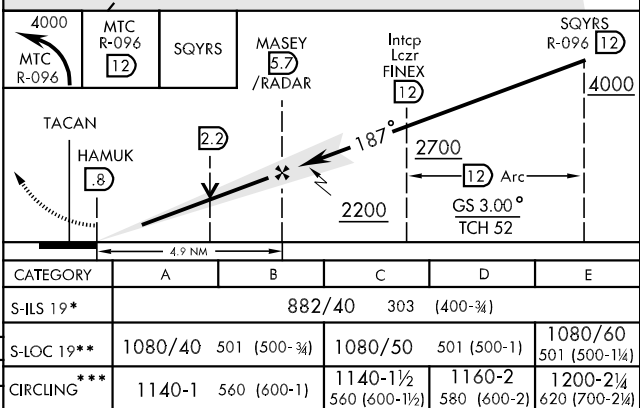
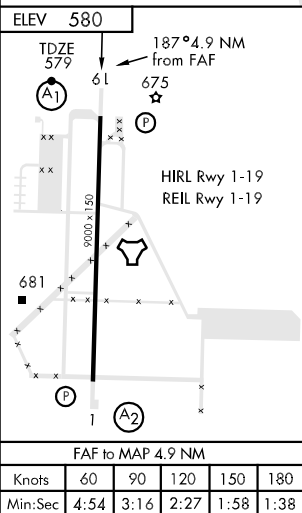
GND CON  
**128.3 275.8**

CLNC DEL  
**119.0 259.95**

\*\*\* Circling not authorized W of Rwy 1-19.

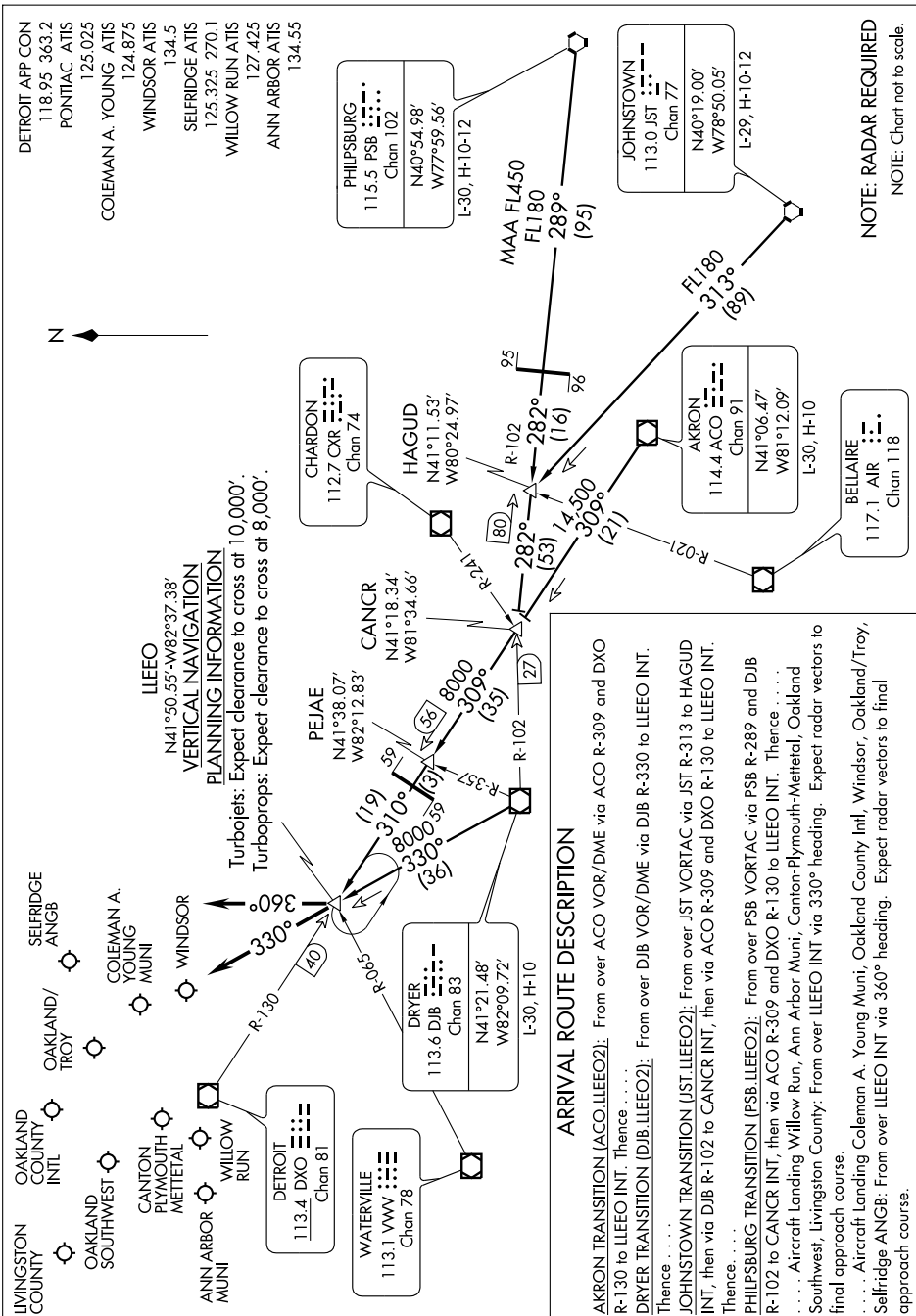


EMERG SAFE ALT 100 NM 3100



## LLEEO TWO ARRIVAL

EC-1, 23 SEP 2010 to 21 OCT 2010



## LLEEO TWO ARRIVAL

(SPRTN.SPRTN3) 10210

ST-118 (FAA)

## SPRTN THREE ARRIVAL

DETROIT, MICHIGAN

DETROIT APP CON

127.5 239.275

WILLOW RUN ATIS 127.425

PONTIAC ATIS 125.025

COLEMAN A. YOUNG ATIS 124.875

WINDSOR ATIS 134.5

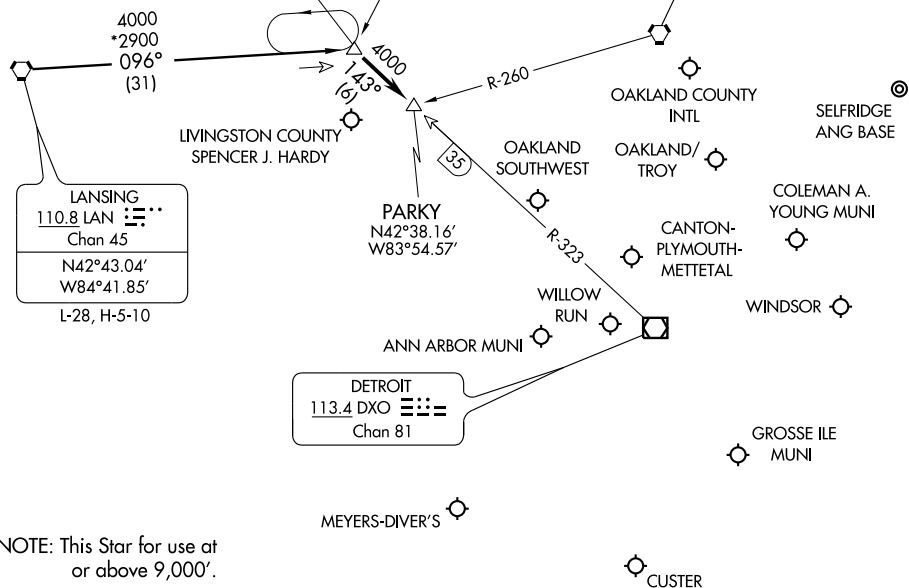
SELFRIAGE ATIS 125.325 270.1

SPRTN

N42°42.52'-W84°00.23'

VERTICAL NAVIGATION  
PLANNING INFORMATION

TURBOJETS/TURBOPROPS:

Expect clearance to cross at  
9000'.NOTE: This Star for use at  
or above 9,000'.

NOTE: Chart not to scale.

EC-1, 23 SEP 2010 to 21 OCT 2010

LANSING TRANSITION (LAN.SPRTN3): From over LAN VORTAC via LAN R-096  
to SPRTN INT. Thence . . . .. . . . Aircraft landing: DET, PTK, VLL, D98, MTC, ARB, YIP, ONZ,  
1D2, TTF, Y47, 36MI, OZW, 3TE, YQG: From over SPRTN INT via DXO R-323  
to PARKY INT. Thence . . . .

. . . . Expect radar vectors to final approach course.

## SPRTN THREE ARRIVAL

DETROIT, MICHIGAN

(SPRTN.SPRTN3) 10210

TACAN MTC Chan <b>64</b>	APCH CRS <b>018°</b>	Rwy Idg <b>9000</b> TDZE <b>580</b> Arpt Elev <b>580</b>
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AL-276 [USAF]

SELFRIDGE ANGB (KMTC)

**T** \* When ALS inop, increase CAT AB RVR to 50 and vis to 1 mile, CAT C vis to 1½ miles, CAT D vis to 1¾ miles, CAT E vis to 2 miles.



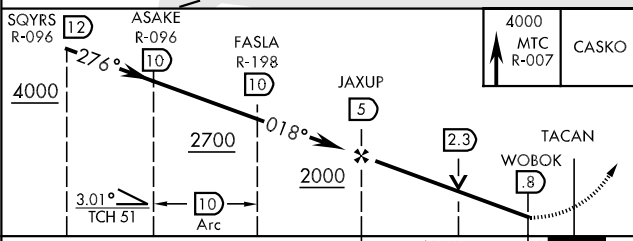
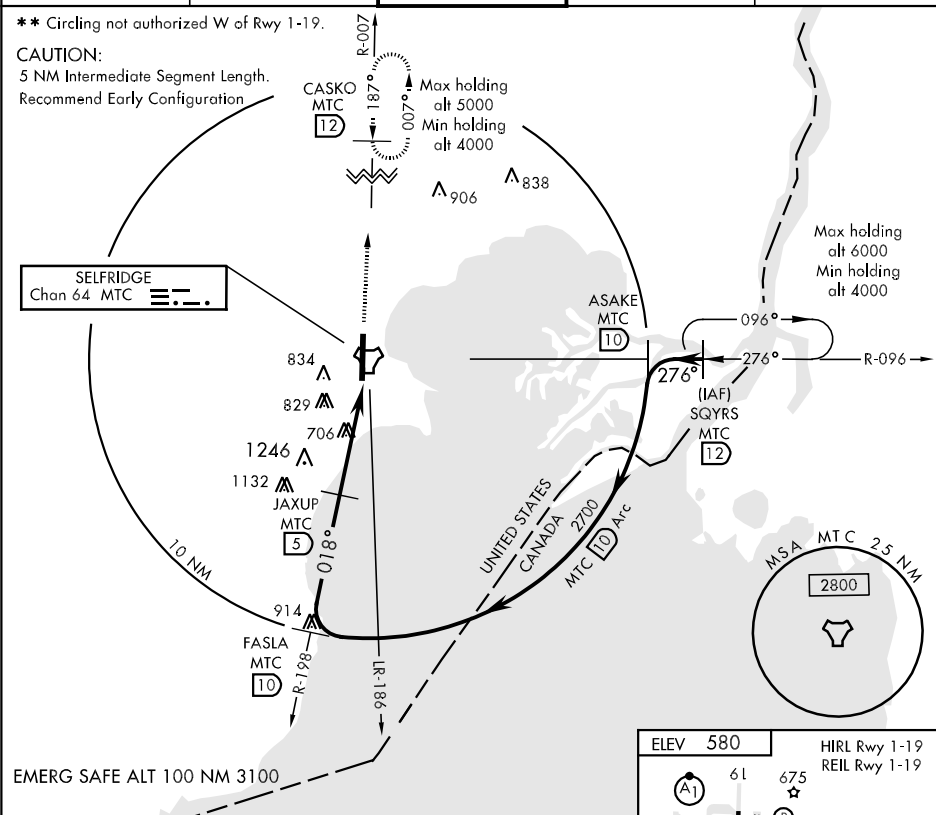
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ATIS 125.325 270.1	SELFDRIDGE APP CON 119.6 318.2	SELFDRIDGE TOWER 120.15 225.4	GND CON 128.3 275.8	CLNC DEL 119.0 259.95
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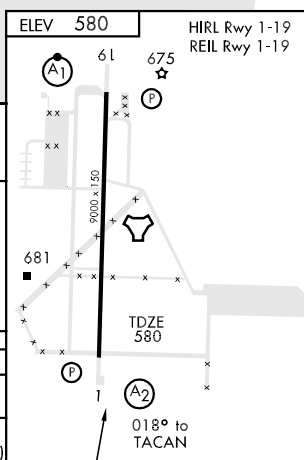
**\*\* Circling not authorized W of Rwy 1-19.**

**CAUTION:**

5 NM Intermediate Segment Length.  
Recommend Early Configuration



CATEGORY			4.2 NM		11
	A	B	C	D	E
S-1*	1140/40	560 (600-3/4)	1140/60 560 (600-1/4)	1140-1 1/2 560 (600-1/2)	1140-1 3/4 560 (600-1/4)
CIRCLING **	1140-1	560 (600-1)	1140-1 1/2 560 (600-1/2)	1160-2 580 (600-2)	1200-2 1/4 620 (700-2 1/4)



TACAN MTC Chan <b>64</b>	APCH CRS <b>177°</b>	Rwy Idg TDZE Arpt Elev	<b>9000</b> <b>579</b> <b>580</b>
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AL-276 [USAF]

SELFIDGE ANGB (KMTC)

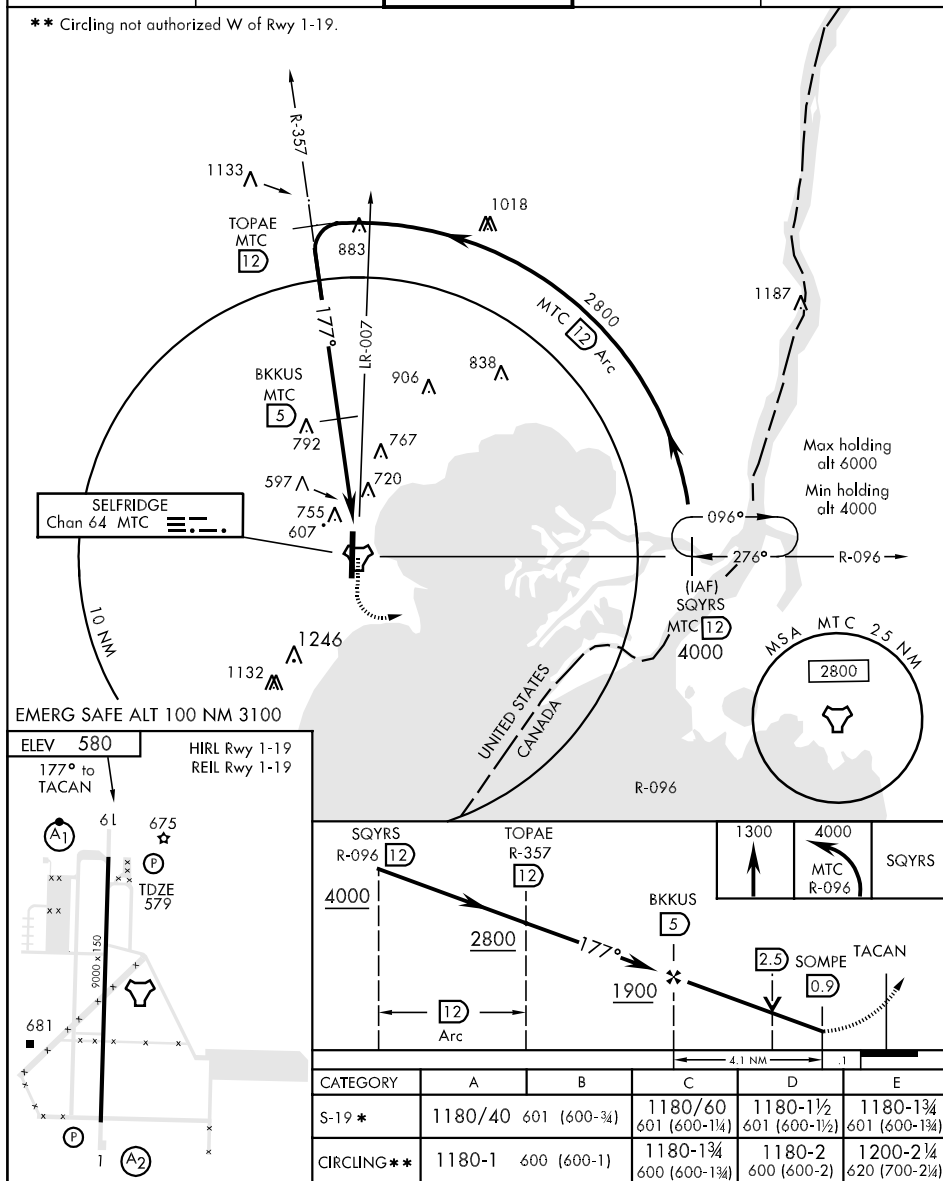
▼ \* When ALS inop, increase CAT AB RVR to 50 and vis to 1 mile, CAT C vis to 1¾ miles, CAT D vis to 2 miles, CAT E vis to 2¼ miles.



MISSED APPROACH: Climb to 1300 then climbing left turn to 4000, intercept MTC TACAN R-096 to SQYRS and hold, continue climb-in-hold to 4000.

ATIS <b>125.325 270.1</b>	SELFIDGE APP CON <b>119.6 318.2</b>	SELFIDGE TOWER <b>120.15 225.4</b>	GND CON <b>128.3 275.8</b>	CLNC DEL <b>119.0 259.95</b>
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\*\* Circling not authorized W of Rwy 1-19.



10210

## AIRPORT DIAGRAM

AL-278 (FAA)

MUSKEGON COUNTY (MKG)  
MUSKEGON, MICHIGAN

ATIS  
124.3  
MUSKEGON TOWER ★  
126.25 363.1  
GND CON  
121.6

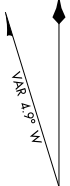
FIELD  
ELEV  
629

D

43°11.0'N

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.  
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

43°10.5'N

  
 JANUARY 2010  
 ANNUAL RATE OF CHANGE  
 0.1° W

43°10.0'N

ELEV 621 061.3°  
 ELEV 627 142.3°  
 6501 X 150 241.3°  
 6100 X 150 322.3°  
 ELEV 625  
 RWY 06-24  
 S-100, D-160, 2S-175, 2D-300  
 RWY 14-32  
 S-80, D-120, 2S-165, 2D-210

43°09.5'N

86°15.0'W

86°14.5'W

86°14.0'W

86°13.5'W

## AIRPORT DIAGRAM

10210

MUSKEGON, MICHIGAN  
MUSKEGON COUNTY (MKG)

EC-1, 23 SEP 2010 to 21 OCT 2010

**MUSKEGON CO** (MKG) 4 S UTC-5(-4DT) N43°10.13' W86°14.26'

629 B S4 FUEL 100LL, JET A OX 2 Class I, ARFF Index A NOTAM FILE MKG

RWY 06-24: H6501X150 (ASPH-PFC) S-100, D-160, 2S-175, 2D-300 HIRL

CHICAGO

H-5E, 10F, L-281

IAP, AD

RWY 06: REIL. VASI(V4L)—GA 3.0° TCH 45'. Trees.

RWY 24: MALSR. VASI(V4L)—GA 3.0° TCH 51'. Tree.

RWY 14-32: H6100X150 (ASPH-PFC) S-80, D-120, 2S-165, 2D-210 HIRL

RWY 14: REIL. PAPI(P4L)—GA 3.0° TCH 45'.

RWY 32: MALSR. Tree.

**RUNWAY DECLARED DISTANCE INFORMATION**

RWY 06: TORA-6501 TODA-6501 ASDA-6501 LDA-6501

RWY 24: TORA-6501 TODA-6501 ASDA-6501 LDA-6501

**AIRPORT REMARKS:** Attended 1100-0200Z†, other hrs call

231-798-2126. Rwy 14-32 CLOSED between 0400Z† and 1100Z† daily. Deer and birds on and invof of arpt. 24 hr PPR for unscheduled air carrier ops with more than 30 passenger seats between 0400-1100Z†, call airport manager 231-798-4596.

After hours 231-798-1329. VASI Rwy 06, Rwy 24, PAPI Rwy 14 opr continuously. When twr clsd, ACTIVATE HIRL Rwy 06-24 and Rwy 14-32, REIL Rwy 06 and Rwy 14, MALSR Rwy 24 and Rwy 32—CTAF. Ldg fee.

**WEATHER DATA SOURCES:** ASOS (231) 798-1317. HIWAS 115.2 MKG.

**COMMUNICATIONS:** CTAF 126.25 ATIS 124.3 UNICOM 122.95

RCO 122.5 (LANSING RADIO)

Ⓡ APP/DEP CON 118.2 North of V-2. 119.8 South of V-2.

Ⓡ CHICAGO CENTER APP/DEP CON 132.27 (0400-1100Z†)

TOWER 126.25 (1100-0400Z†) GND CON 121.6

AIRSPACE: CLASS D svc 1100-0400Z† other times CLASS E.

TRSA svc etc APP CON within 20 NM.

**RADIO AIDS TO NAVIGATION:** NOTAM FILE MKG.

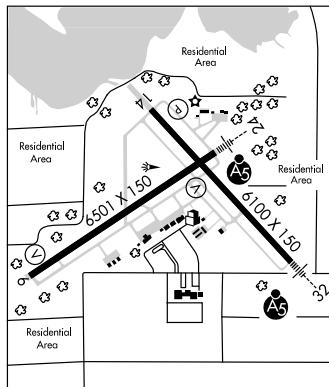
(L) VORTACW 115.2 MKG Chan 99 N43°10.16' W86°02.36' 271° 8.7 NM to fld. 659/1W. HIWAS.

MUSKO NDB (LOM) 219 MK N43°07.27' W86°10.12' 316° 4.2 NM to fld. Unmonitored. LOM unusable byd 10 NM.

ILS 109.9 I-MKG Rwy 32. Class IE. LOM MUSKO NDB. LOM unusable byd 10 NM. LOC BC unusable byd 12° left of course byd 20° right of course. Unmonitored when twr clsd.

ILS/DME 109.5 I-CJH Chan 32 Rwy 24. Class IB. LOC only. Unmonitored when twr clsd.

ASR (1100-0400Z†)



**MUSKO** N43°07.27' W86°10.12' NOTAM FILE MKG.

NDB (LOM) 219 MK 316° 4.2 NM to Muskegon Co. Unmonitored. Unusable byd 10 NM.

CHICAGO

L-281

## NAPOLEON

**NAPOLEON** (3NP) 1 NW UTC-5(-4DT) N42°10.25' W84°15.58'

DETROIT

963 S2 NOTAM FILE LAN

RWY 09-27: 2740X200 (TURF)

RWY 09: Thld dspld 1200'. Road.

RWY 27: Trees.

RWY 15-33: 2500X160 (TURF)

RWY 15: Thld dspld 290'. Road.

RWY 33: Thld dspld 550'. Trees.

**AIRPORT REMARKS:** Attended irregularly. Oil tanks S of arpt. Ultralight ops in grass W of Rwy 15-33. Rwy 33 +11' parked vehicles at the thld and buildings 150' distance. Rwy 09-27 and Rwy 15-33 marked with 3' yellow cones; dspld thlds marked with three 3' yellow cones each side of rwy.

**COMMUNICATIONS:** CTAF 122.9

**VAN WAGNEN** (6H4) 5W UTC-5(-4DT) N42°09.39' W84°20.06'

DETROIT

980 NOTAM FILE LAN

RWY 09-27: 2105X55 (TURF) LIRL

RWY 09: Trees. RWY 27: P-line.

**AIRPORT REMARKS:** Attended continuously. Rwy 09-27 marked with yellow tires.

**COMMUNICATIONS:** CTAF 122.9


**NARTRON FLD** (See REED CITY)

LOC/DME I-CJH <b>109.5</b> Chan <b>32</b>	APP CRS <b>240°</b>	Rwy Idg TDZE Apt Elev	<b>6501</b> <b>627</b> <b>629</b>
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# ILS or LOC RWY 24

## MUSKEGON COUNTY (MKG)

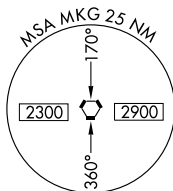
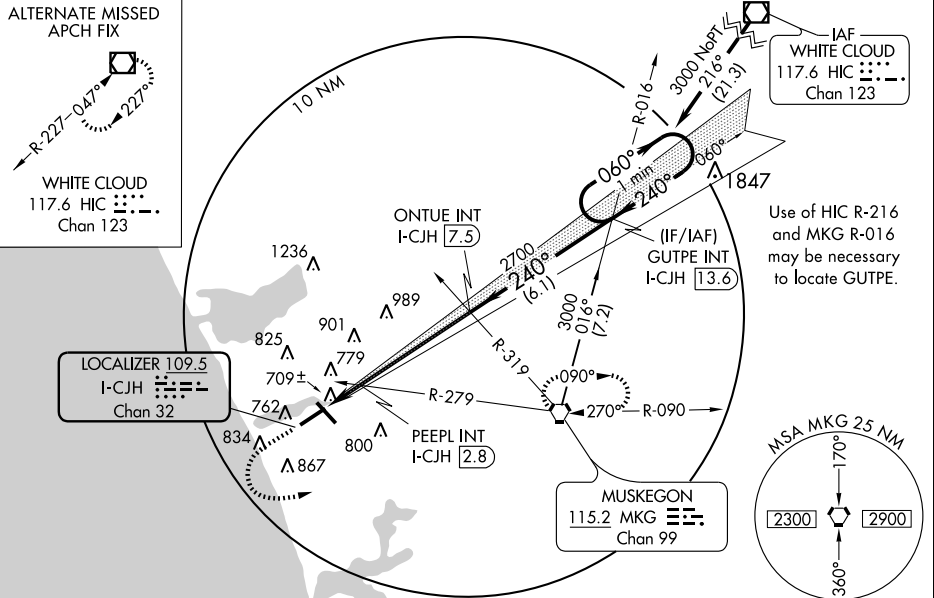
**VDP** NA with Fremont altimeter setting. When local altimeter setting not received, use Fremont altimeter setting and increase all DA 65 feet and all MDA 80 feet. Increase S-LOC 24 Cats C/D and Circling Cat C visibility ¼ mile. PEEPL Fix minimums: increase S-LOC 24 Cat C visibility ¼ mile. PEEPL FIX Minimums: For inoperative MALSR, increase S-LOC 24 all Cat D visibility to 1 mile. For inoperative MALSR, when using Fremont altimeter setting; increase S-ILS 24 visibility to 1 mile all Cats

**MALSR**  
  
**MISSED APPROACH:**  
Climb to 2500 then left turn direct MKG VORTAC and hold.

ATIS <b>124.3</b>	MUSKEGON APP CON ★ <b>118.2 339.1</b> (N of V2) <b>119.8 339.1</b> (S of V2)	MUSKEGON TOWER ★ <b>126.25 (CTAF) 0 363.1</b>	GND CON <b>121.6</b>	UNICOM <b>122.95</b>
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ALTERNATE MISSED  
APCH FIX

  
WHITE CLOUD  
117.6 HIC  
Chan 123



ELEV 629

**D**

240° 6.2 NM  
from FAF

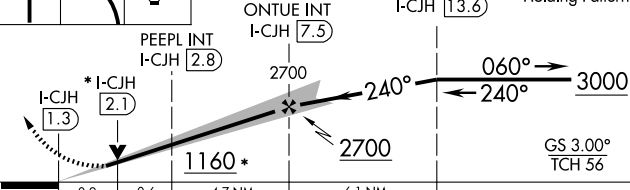
TDZE 627

2500

MKG

\* 1240 when using Fremont altimeter setting.  
\* LOC Only

One Minute Holding Pattern



CATEGORY	A	B	C	D
S-ILS 24	827-½ 200 (200-½)			
S-LOC 24	1160-½ 533 (600-½)	1160-1 533 (600-1)	1160-1 533 (600-1)	1160-1¼ 533 (600-1¼)
CIRCLING	1160-1 531 (600-1)	1160-1½ 531 (600-1½)	1180-2 551 (600-2)	1180-2 551 (600-2)
PEEPL FIX MINIMUMS				
S-LOC 24	960-½ 333 (400-½)	960-¾ 333 (400-¾)	960-¾ 333 (400-¾)	960-¾ 333 (400-¾)
CIRCLING	1080-1 451 (500-1)	1140-1½ 511 (600-1½)	1180-2 551 (600-2)	1180-2 551 (600-2)

REIL Rwy 6 and 14  
HIRL Rwy 6-24 and 14-32

FAF to MAP 6.2 NM

Knots	60	90	120	150	180
Min:Sec	6:12	4:08	3:06	2:29	2:04

MUSKEGON, MICHIGAN

Amdt 5 23SEP10

43°10'N - 86°14'W

MUSKEGON COUNTY (MKG)

# ILS or LOC RWY 24



LOC I-MKG <b>109.9</b>	APP CRS <b>321°</b>	Rwy Idg <b>6100</b> TDZE <b>629</b> Apt Elev <b>629</b>
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ILS or LOC RWY 32  
MUSKEGON COUNTY (MKG)

**T** \*RVR 1800 authorized with the use of FD or AP or HUD to DA.  
**A** When local altimeter setting not received, use Fremont altimeter setting  
 ASR and increase DA 65 feet, and all MDA 80 feet, increase S-LOC Cat C  
 visibility to RVR 4000, Cat D visibility to RVR 5000.

MALSR

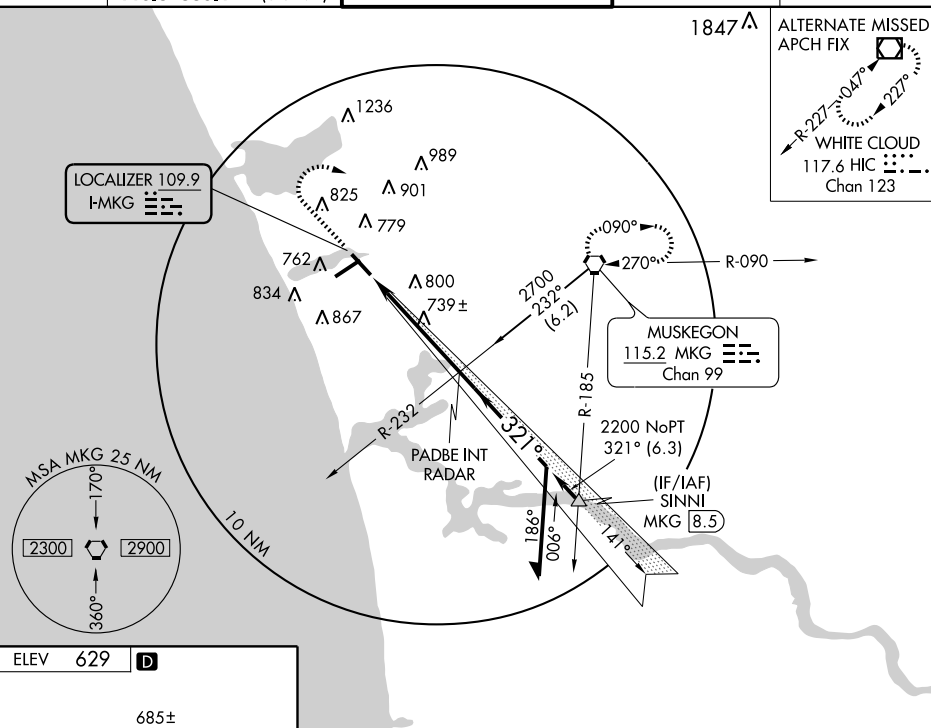
 

**MISSED APPROACH:** Climb to 2500 then right turn direct MKG VORTAC and hold.

ATIS	MUSKEGON APP CON ★
124.3	118.2 339.1 (N of V2)
	119.8 339.1 (S of V2)

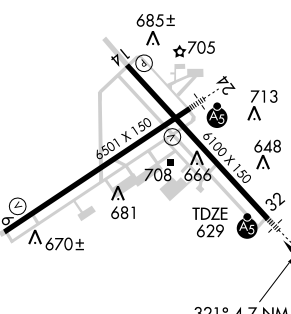
MUSKEGON TOWER ★  
126.25 (CTAF) 363.1

GND CON  
121.6

UNICOM  
122.95

ELEV	629	D
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**D**



REIL Rwy 6 and 14 **L**  
HIRL Rwy 6-24 and 14-32 **L**

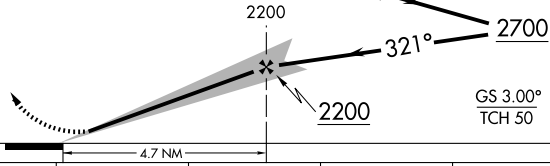
FAF to MAP 4.7 NM

Knots	60	90	120	150	180
Min:Sec	4:42	3:08	2:21	1:53	1:34



PADBE INT  
RADAR

Remain  
within 10 NM



CATEGORY	A	B	C	D
S-LS 32	*829/24 200 (200-½)			
S-LOC 32	1000/24 371 (400-½)			1000/40 371 (400-¾)
CIRCLING	1080-1 451 (500-1)		1140-1½ 511 (600-1½)	1180-2 551 (600-2)

MUSKEGON, MICHIGAN

Amdt 18A 03JUN10

43°10'N - 86°14'W

MUSKEGON COUNTY (MKG)

ILS or LOC RWY 32

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1. 23 SEP 2010 to 21 OCT 2010

LOC I-MKG <b>109.9</b>	APP CRS <b>141°</b>	Rwy Idg TDZE <b>6100</b> Apt Elev <b>629</b>
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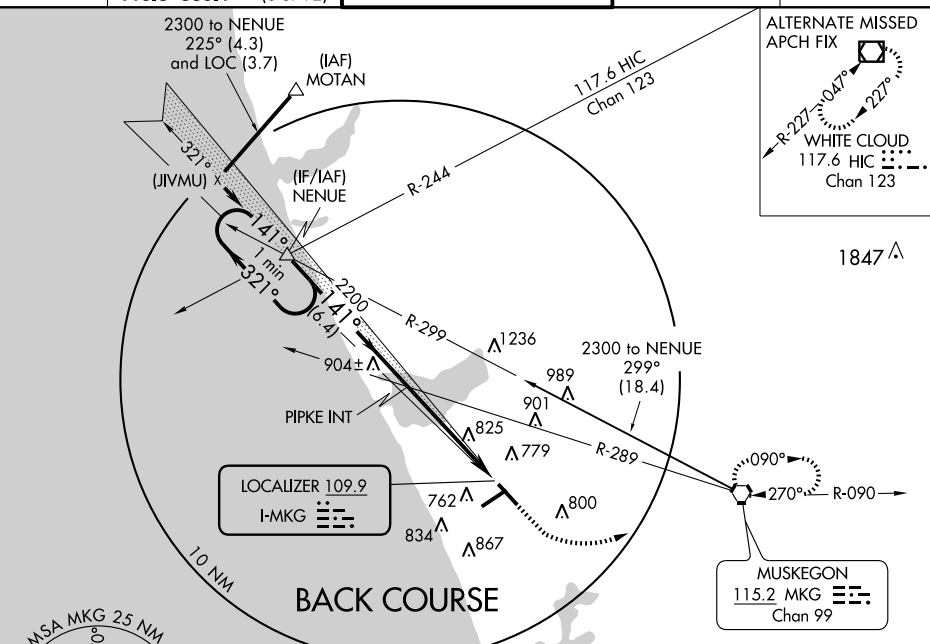
# LOC BC RWY 14

## MUSKEGON COUNTY (MKG)

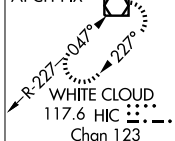
**V** Visibility reduction by helicopters NA. When local altimeter setting not received, use Fremont altimeter setting and increase all MDA 80 feet.

**MISSED APPROACH:** Climb to 2500 then left turn direct MKG VORTAC and hold.

ATIS <b>124.3</b>	MUSKEGON APP CON ★ <b>118.2 339.1</b> (N of V2) <b>119.8 339.1</b> (S of V2)	MUSKEGON TOWER ★ <b>126.25</b> (CTAF) <b>0 363.1</b>	GND CON <b>121.6</b>	UNICOM <b>122.95</b>
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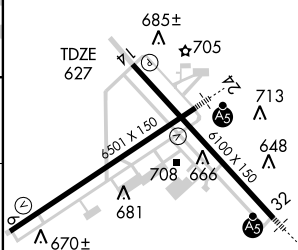
ALTERNATE MISSED APCH FIX



1847 M

MUSKEGON  
115.2 MKG  
Chan 99

ELEV 629 **D**



REIL Rwy 6 and 14  
HIRL Rwy 6-24 and 14-32

FAF to MAP 4.1 NM

Knots	60	90	120	150	180
Min:Sec	4:06	2:44	2:03	1:38	1:22

WAAS Ch <b>56618</b> <b>W06A</b>	APP CRS <b>060°</b>	Rwy Idg <b>6501</b> TDZE <b>623</b> Apt Elev <b>629</b>
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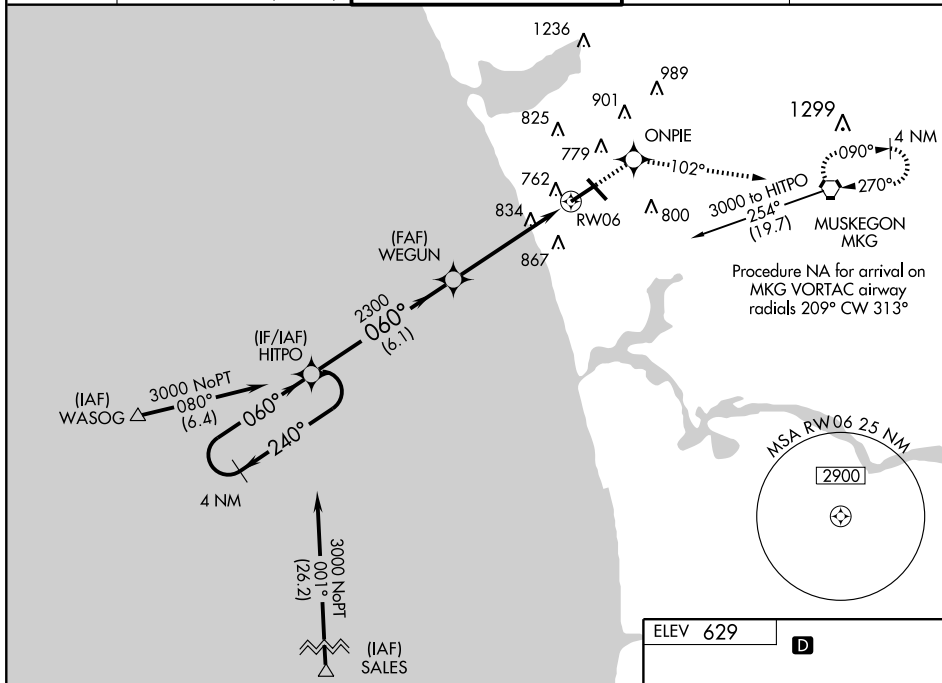
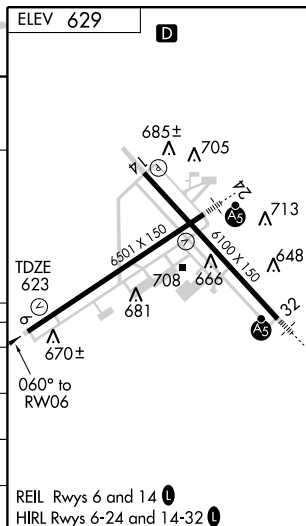
# RNAV (GPS) RWY 6

## MUSKEGON COUNTY (MKG)

**T** When VGSI inoperative, procedure NA at night. Baro-VNAV NA when using Fremont altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Fremont altimeter setting and increase all DA 65 feet and all MDA 80 feet. Increase LPV, LNAV/VNAV all Cats and LNAV Cats C/D visibility ¼ mile.

**MISSED APPROACH:**  
Climb to 3000 direct ONPIE  
and on track 102° to MKG  
VORTAC and hold.

ATIS <b>124.3</b>	MUSKEGON APP CON ★ <b>118.2 339.1</b> (N of V2) <b>119.8 339.1</b> (S of V2)	MUSKEGON TOWER ★ <b>126.25 (CTAF) 0 363.1</b>	GND CON <b>121.6</b>	UNICOM <b>122.95</b>
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[illegible]

MUSKEGON, MICHIGAN

Amdt 1 23SEPT10

43°10'N - 86°14'W

MUSKEGON COUNTY (MKG)  
RNAV (GPS) RWY 6

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1. 23 SEP 2010 to 21 OCT 2010

WAAS CH <b>69410</b> <b>W14A</b>	APP CRS <b>141°</b>	Rwy ldg TDZE Apt Elev	<b>6100</b> <b>627</b> <b>629</b>
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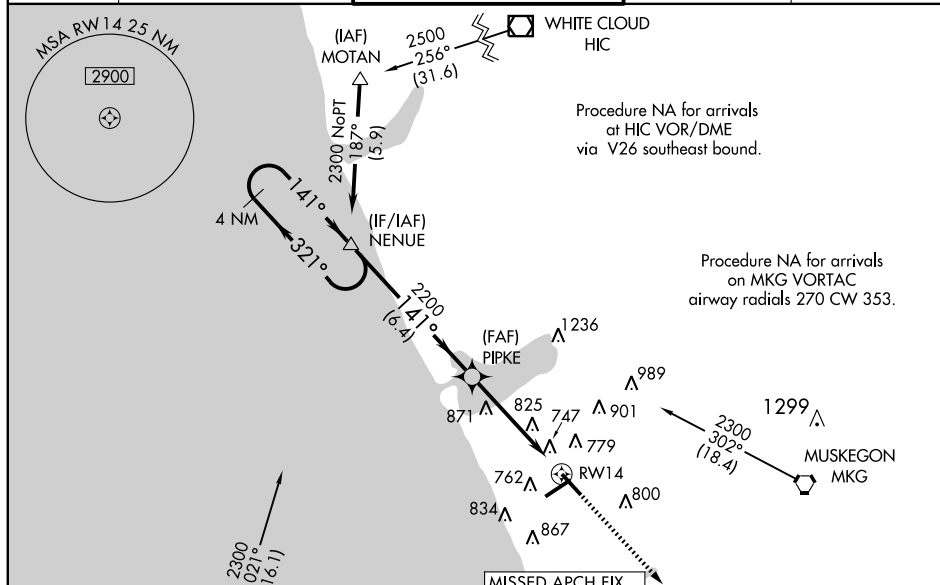
# RNAV (GPS) RWY 14

MUSKEGON COUNTY (MKG)

**⚠** Baro-VNAV NA when using Fremont altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F).  
**⚠** DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Fremont altimeter setting and increase all DA 65 feet and all MDA 80 feet, increase LPV all Cats, LNAV/VNAV all Cats, LNAV Cats C and D, and Circling Cat C visibility ¼ mile. VDP NA when using Fremont altimeter setting.

**MISSED APPROACH:**  
Climb to 2700 direct SINNI and hold.

ATIS <b>124.3</b>	MUSKEGON APP CON ★ <b>118.2 339.1</b> (N of V2) <b>119.8 339.1</b> (S of V2)	MUSKEGON TOWER ★ <b>126.25</b> (CTAF) <b>0 363.1</b>	GND CON <b>121.6</b>	UNICOM <b>122.95</b>
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	<div>4 NM Holding Pattern</div> <div>2300 ← 321° 141° →</div> <div>GS 3.00° TCH 45</div> <div>2200</div> <div>2700 SINNI</div> <div>1.6 NM to RWY 14</div> <div>* LNAV only</div> <div>6.4 NM 3.1 NM 1.6</div>				<div>ELEV 629 <b>D</b></div> <div>141° to RWY 14</div> <div>685±</div> <div>705</div> <div>713</div> <div>648</div> <div>708</div> <div>666</div> <div>681</div> <div>670±</div> <div>6501 X 150</div> <div>600 X 150</div> <div>REIL Rwy 6 and 14 <b>0</b></div> <div>HRL Rwy 6-24 and 14-32 <b>0</b></div>
CATEGORY	A	B	C	D	
LPV DA	877-3/4 250 (300-3/4)				
LNAV/VNAV DA	1079-1 1/2 452 (500-1 1/2)				
LNAV MDA	1180-1	553 (600-1)	1180-1 1/2 553 (600-1 1/2)	1180-1 3/4 553 (600-1 3/4)	
CIRCLING	1180-1	551 (600-1)	1180-1 1/2 551 (600-1 1/2)	1180-2 551 (600-2)	

MUSKEGON, MICHIGAN

Amdt 1 10098

43°10'N - 86°14'W

MUSKEGON COUNTY (MKG)

RNAV (GPS) RWY 14

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010

WAAS Ch <b>42918</b> <b>W24A</b>	APP CRS <b>240°</b>	Rwy Idg TDZE Apt Elev	<b>6501</b> <b>627</b> <b>629</b>
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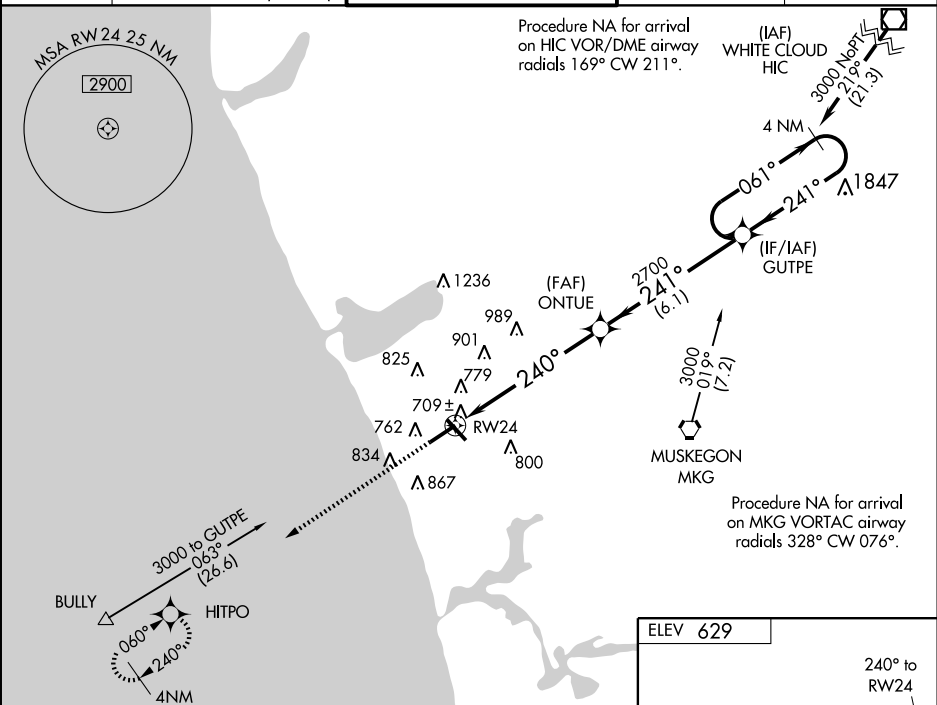
# RNAV (GPS) RWY 24

MUSKEGON COUNTY (MKG)

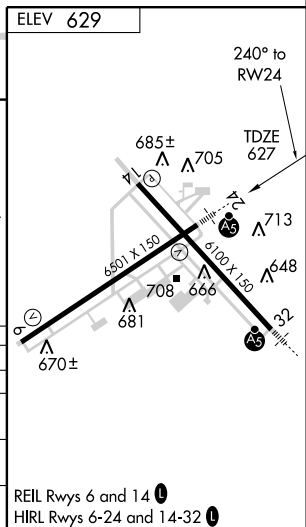
▼ For uncompensated Baro- VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 48°C (118°F). DME/DME RNP -0.3 NA. Baro-VNAV and VDP NA when using Fremont altimeter setting. When local altimeter setting not received, use Fremont altimeter setting and increase all ASR DA 65 feet and all MDA 80 feet. Increase LNAV/VNAV visibility all Cats ½ mile. For inoperative MALSR, when using Fremont altimeter setting: increase LPV visibility to 1 mile all Cats.

MALSR  
MISSED APPROACH:  
Climb to 3000 direct  
HITPO and hold.

ATIS <b>124.3</b>	MUSKEGON APP CON ★ <b>118.2 339.1</b> (N of V2) <b>119.8 339.1</b> (S of V2)	MUSKEGON TOWER ★ <b>126.25 (CTAF) 0 363.1</b>	GND CON <b>121.6</b>	UNICOM <b>122.95</b>
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3000	HITPO	*LNAV only	GUTPE	4 NM Holding Pattern
↑	★			
			ONTUE	
			2700	
			241°	061° 3000
			240°	241°
			2700	GS 3.00° TCH 56
			1.4	4.8 NM 6.1 NM
CATEGORY	A	B	C	D
LPV DA		827-½	200 (200-½)	
LNAV/VNAV DA		1076-1	449 (500-1)	
LNAV MDA	1140-½ 513 (600-½)	1140-1 513 (600-1)	1140-1½ 513 (500-1¼)	
CIRCLING	1140-1 511 (600-1)	1140-1½ 511 (600-1½)	1180-2 551 (600-2)	



WAAS CH <b>63010</b> <b>W32A</b>	APP CRS <b>321°</b>	Rwy Idg TDZE Apt Elev	<b>6100</b> <b>629</b> <b>629</b>
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# RNAV (GPS) RWY 32

## MUSKEGON COUNTY (MKG)

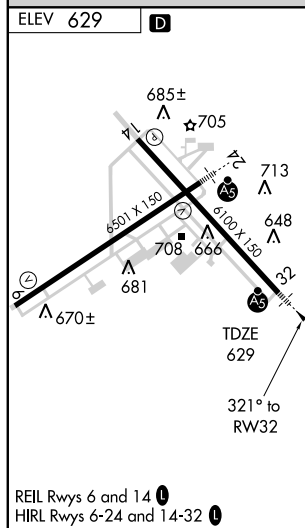
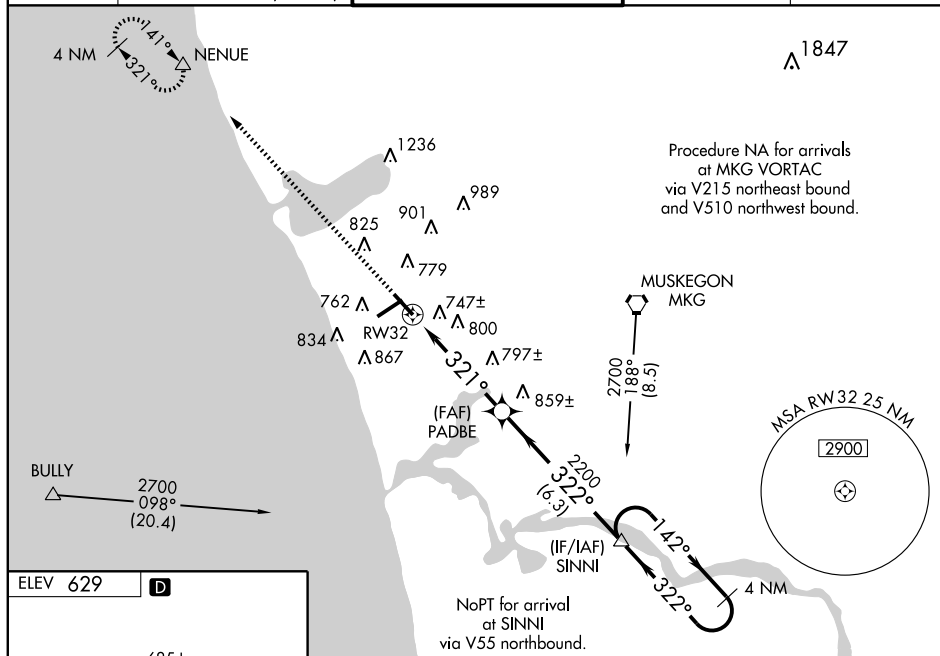
**▼** For inoperative MALS, increase LPV all Cats visibility to RVR 5000. Baro-VNAV NA when using Fremont altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Fremont altimeter setting and increase all DA 65 feet, all MDA 80 feet, increase LPV all Cats visibility to RVR 4000, LNAV/VNAV all Cats visibility to RVR 6000, LNAV Cat C visibility to RVR 5000 and LNAV Cat D visibility to RVR 6000. VDP NA when using Fremont altimeter setting.

MALS



**MISSED APPROACH:**  
Climb to 2300 direct  
NENUE and hold.

ATIS <b>124.3</b>	MUSKEGON APP CON ★ <b>118.2 339.1</b> (N of V2) <b>119.8 339.1</b> (S of V2)	MUSKEGON TOWER ★ <b>126.25 (CTAF) 363.1</b>	GND CON <b>121.6</b>	UNICOM <b>122.95</b>
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2300

↑

NENUE

△

\*LNAV only

\*1.3 NM to RW32

PADBE

2200

SINNI

4 NM Holding Pattern

142° → 2700

← 322°

GS 3.00° TCH 50

321°

322°

2200

1.3 NM

3.4 NM

6.3 NM

RW32

CATEGORY	A	B	C	D
LPV DA	913/24		284 (300-½)	
LNAV/VNAV DA	1029/50		400 (400-1)	
LNAV MDA	1100/24	471 (500-½)	1100/40 471 (500-¾)	1100/50 471 (500-1)
CIRCLING	1100-1	471 (500-1)	1140-1½ 511 (600-1½)	1180-2 551 (600-2)



MUSKEGON, MICHIGAN



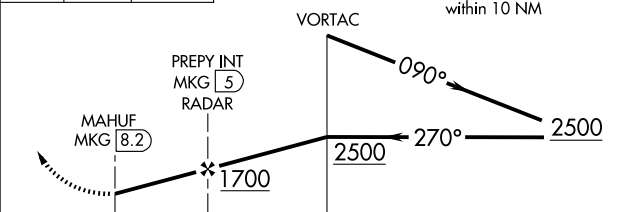
Amdt 1 10098

43°10'N - 86°14'W

# MUSKEGON COUNTY (MKG)

## RNAV (GPS) RWY 32

 ADF, DME or RADAR REQUIRED.  If local altimeter setting not received, use Tulip City altimeter setting and increase all MDAs 80 feet. ASR	MISSED APPROACH: Climb to 2500 then left turn direct MKG VORTAC and hold.
--	---

2500 ↑	  <u>115.2</u>				
CATEGORY	A	B	C	D	
CIRCLING	1100-1	472 (500-1)	1180-1½ 552 (600-1½)	1220-2 592 (600-2)	

EC-1. 23 SEP 2010 to 21 OCT 2010

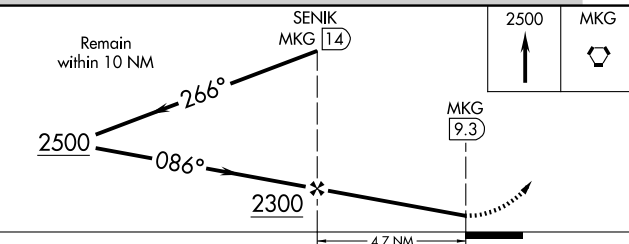
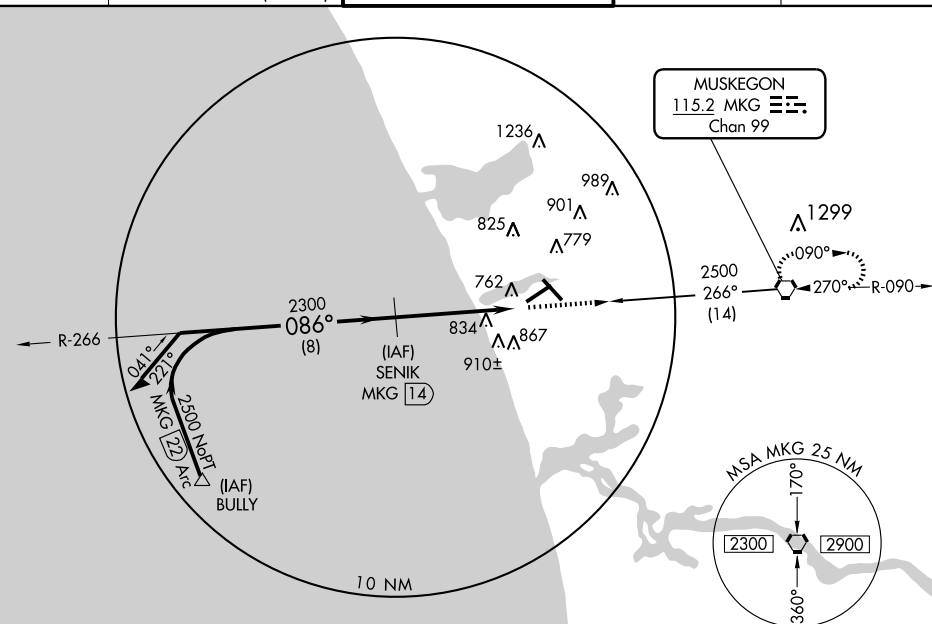
VORTAC MKG	APP CRS	Rwy Idg	<b>6501</b>
<b>115.2</b>	<b>086°</b>	TDZE	<b>623</b>
Chan <b>99</b>		Apt Elev	<b>629</b>

**VOR/DME RWY 6**  
MUSKEGON COUNTY (MKG)

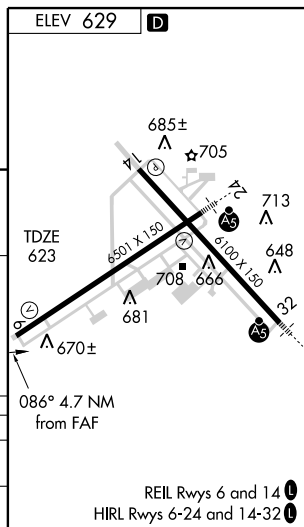
**ASR** When local altimeter setting not received, use Fremont  
altimeter setting and increase all MDA 80 feet; increase  
S-6 Cats C/D visibility and circling CAT C visibility ¼ mile.

**MISSED APPROACH:** Climb to 2500 direct MKG  
VORTAC and hold.

ATIS <b>124.3</b>	MUSKEGON APP CON ★ <b>118.2 339.1</b> (N of V2) <b>119.8 339.1</b> (S of V2)	MUSKEGON TOWER ★ <b>126.25</b> (CTAF) <b>363.1</b>	GND CON <b>121.6</b>	UNICOM <b>122.95</b>
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CATEGORY	A	B	C	D
S-6	1160-1	537 (600-1)	1160-1½ 537 (600-1½)	1160-1¾ 537 (600-1¾)
CIRCLING	1160-1	531 (600-1)	1160-1½ 531 (600-1½)	1220-2 591 (600-2)



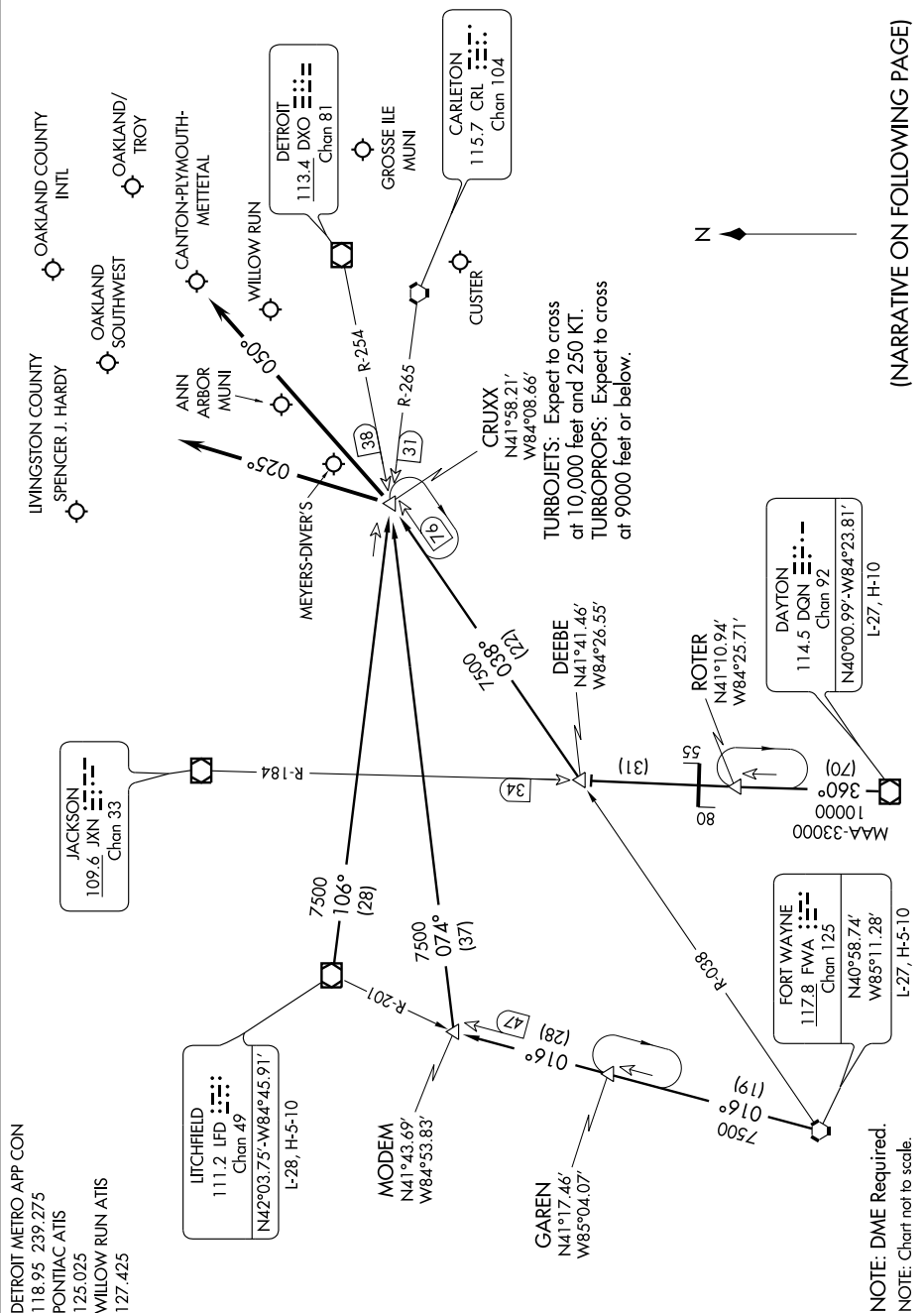




## CRUXX FOUR ARRIVAL

DETROIT, MICHIGAN

EC-1, 23 SEP 2010 to 21 OCT 2010



## CRUXX FOUR ARRIVAL

(CRUXX.CRUXX4) 10210

DETROIT, MICHIGAN

EC-1, 23 SEP 2010 to 21 OCT 2010

## CRUXX FOUR ARRIVAL (CRUXX.CRUX4)

DETROIT, MICHIGAN

## ARRIVAL DESCRIPTION

DAYTON TRANSITION (DQN.CRUX4): From over DQN VOR/DME via DQN R-360 and JXN R-184 to DEEBE INT and FWA R-038 to CRUXX INT. Thence . . . .

FORT WAYNE TRANSITION (FWA.CRUX4): From over FWA VORTAC via FWA R-016 to MODEM INT and DXO R-254 to CRUXX INT. Thence . . . .

LITCHFIELD TRANSITION (LFD.CRUX4): From over LFD VORTAC via LFD R-106 to CRUXX INT. Thence . . . .

. . . . Aircraft landing Y47, PTK, 0MI7, ØZW, ONZ, 1D2, TTF, VLL: From over CRUXX INT via 025° heading.

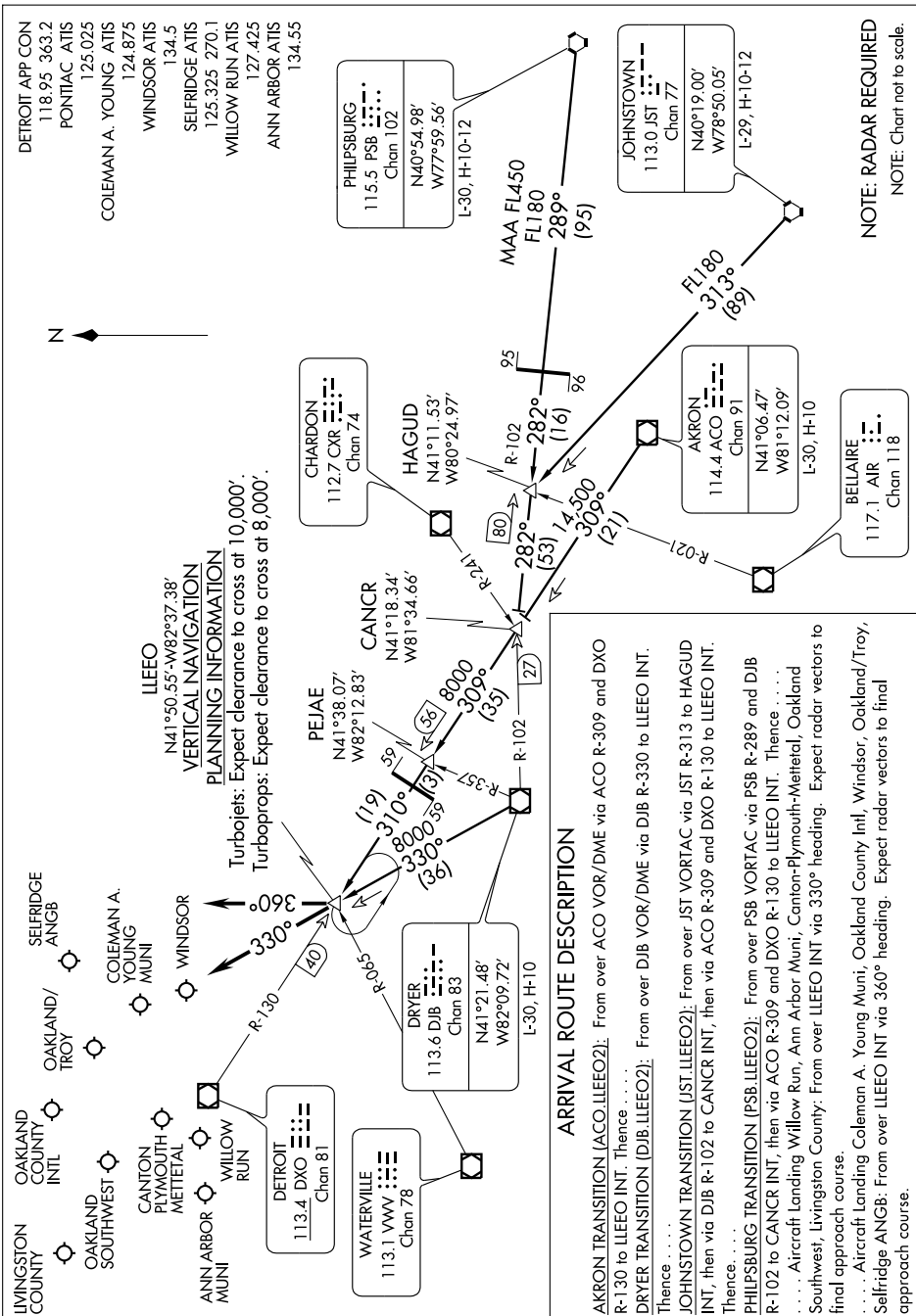
. . . . Aircraft landing YIP or ARB: From over CRUXX INT via 050° heading. Expect radar vector to final approach course.

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010

## LLEEO TWO ARRIVAL

EC-1, 23 SEP 2010 to 21 OCT 2010



## LLEEO TWO ARRIVAL

## SPRTN THREE ARRIVAL

DETROIT, MICHIGAN

DETROIT APP CON

127.5 239.275

WILLOW RUN ATIS 127.425

PONTIAC ATIS 125.025

COLEMAN A. YOUNG ATIS 124.875

WINDSOR ATIS 134.5

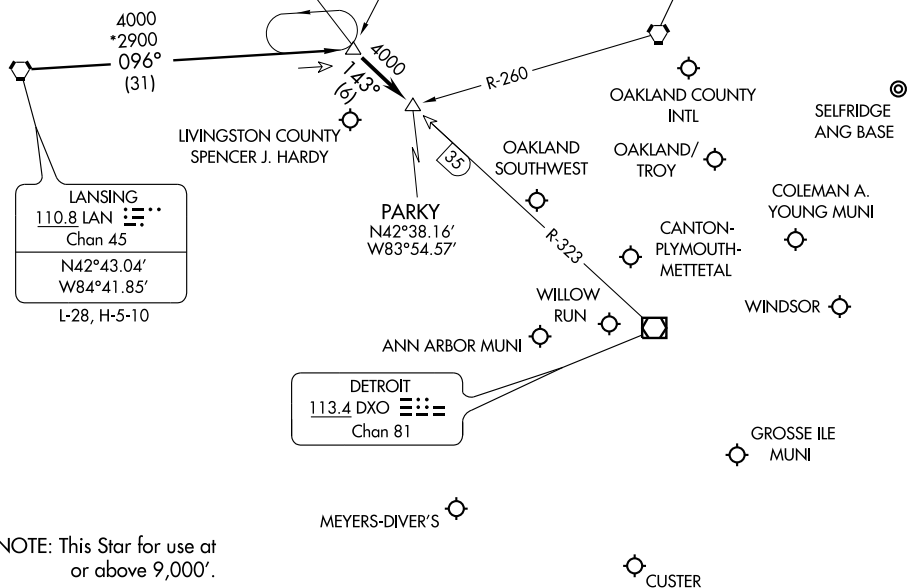
SELFIDGE ATIS 125.325 270.1

## SPRTN

N42°42.52'-W84°00.23'

VERTICAL NAVIGATION  
PLANNING INFORMATION

## TURBOJETS/TURBOPROPS:

Expect clearance to cross at  
9000'.

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010

**LANSING TRANSITION (LAN.SPRTN3):** From over LAN VORTAC via LAN R-096 to SPRTN INT. Thence . . .

. . . Aircraft landing: DET, PTK, VLL, D98, MTC, ARB, YIP, ONZ, 1D2, TTF, Y47, 36MI, OZW, 3TE, YQG: From over SPRTN INT via DXO R-323 to PARKY INT. Thence . . .

. . . Expect radar vectors to final approach course.

## SPRTN THREE ARRIVAL

DETROIT, MICHIGAN

(SPRTN.SPRTN3) 10210

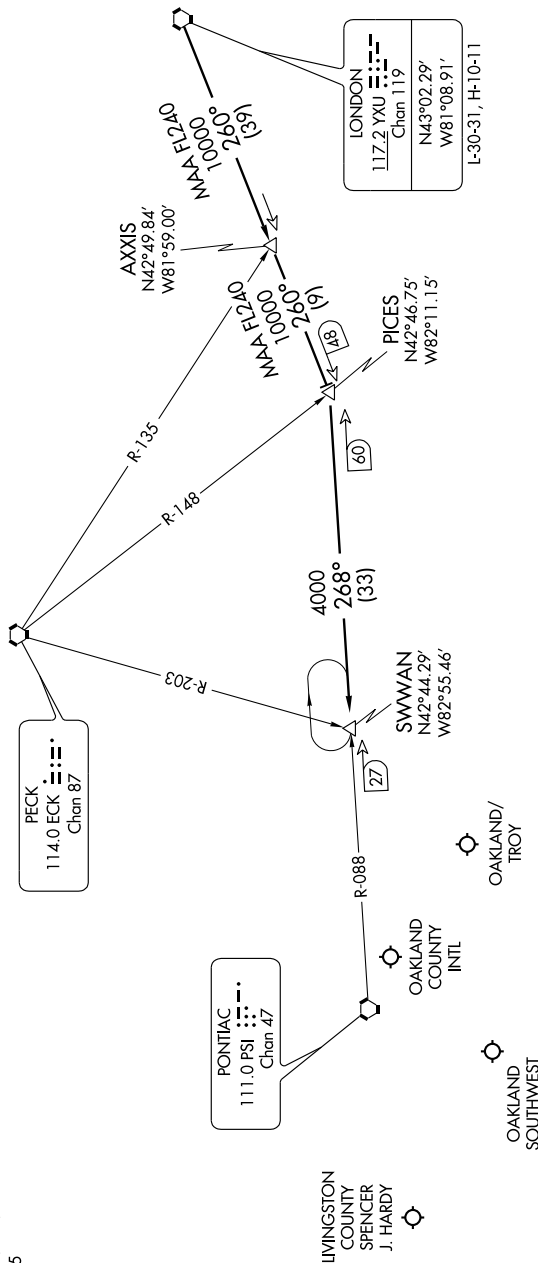
SWWAN ONE ARRIVAL

DETROIT APP CON  
127.5 363.2  
PONTIAC ATIS  
125.025

SWWAN ONE ARRIVAL  
(SWWAN.SWWAN1) 10042

ST-5052 (FAA)

PONTIAC, MICHIGAN



ARRIVAL ROUTE DESCRIPTION

LONDON TRANSITION (YXU.SWWAN1): From over YXU VORTAC via YXU R-260 to PICES INT, then via PSI R-088 to SWWAN INT. Thence . . . .

. . . . From SWWAN, expect radar vectors to final approach course.

NOTE: RADAR Required.  
NOTE: Chart not to scale.

EC-1, 23 SEP 2010 to 21 OCT 2010

PONTIAC, MICHIGAN

VORTAC SVM <b>114.3</b> Chan <b>90</b>	APP CRS <b>350°</b>	Rwy Idg TDZE Apt Elev <b>926</b>	N/A N/A <b>926</b>
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**VOR or GPS-A**

NEW HUDSON / OAKLAND SOUTHWEST (Y47)



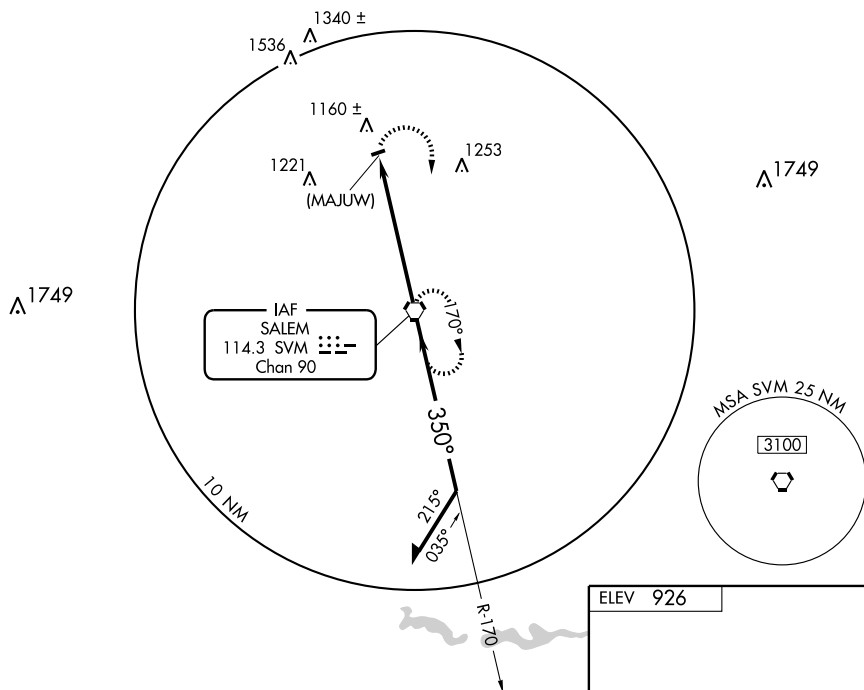
NA

Use Detroit Willow Run airport altimeter setting.  
Night visibility minimums 2 miles.  
When VGSI inop, Circling to Rwy 8 NA at night.

MISSED APPROACH: Climbing right turn  
to 3000 direct SVM VORTAC and hold.

DETROIT APP CON  
**127.5 363.2**

UNICOM  
**122.7** (CTAF) **0\***



3000	SVM 114.3
------	--------------

VORTAC

Remain  
within 10 NM

(MAJUW)  
SVM  
**5.7**

2700

170°

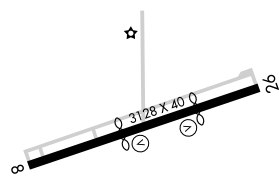
2700



5.7 NM

CATEGORY	A	B	C	D
CIRCLING	1520-1	594 (600-1)	NA	

ELEV 926

LIRL Rwy 8-26 **0\***

FAF to MAP 5.7 NM

Knots	60	90	120	150	180
Min:Sec	5:42	3:48	2:51	2:17	1:54

**NEWBERRY** N46°18.75' W85°27.81' NOTAM FILE ERY.

(T) VORW/DME 108.2 ERY Chan 19 at Luce Co. 869/6W. AWOS-3.

VOR/DME unmonitored Mon-Fri 2130-1230Z† and unmonitored Sat-Sun.

RCO 122.4 (GREEN BAY RADIO)

GREEN BAY

L-31B

## NEWBERRY

**LUCE CO** (ERY) 3 SE UTC-5(-4DT) N46°18.66' W85°27.43'

869 B FUEL 100LL NOTAM FILE ERY

RWY 11-29: H4304X75 (ASPH) S-8 MIRL 0.5% up W

RWY 11: REIL. PAPI(P4L)—GA 3.0° TCH 25. Trees.

RWY 29: REIL. PAPI(P4L)—GA 3.0° TCH 35'. Trees.

RWY 04-22: 2856X150 (TURF)

RWY 04: Thld dspcd 936'. Trees.

RWY 22: Trees.

**AIRPORT REMARKS:** Attended Mon-Fri 1330-2100Z†. For svcs other times call 906-293-3703. Rwy 04-22 CLOSED Nov-Mar and when snow covered. Rwy 04-22 marked with 3' yellow cones.

ACTIVATE MIRL Rwy 11-29; REIL Rwy 11 and Rwy 29; PAPI Rwy 11 and Rwy 29 and windcone—CTAF.

**WEATHER DATA SOURCES:** AWOS-3 108.2 ERY (906) 293-2979.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

NEWBERRY RCO 122.4 (GREEN BAY RADIO)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE ERY.

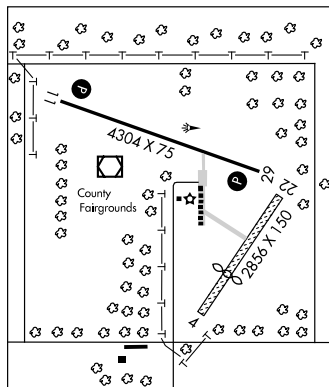
**NEWBERRY (T) VORW/DME** 108.2 ERY Chan 19 N46°18.75' W85°27.81' at fld. 869/6W. AWOS-3.

VOR/DME unmonitored Mon-Fri 2130-1230Z† and unmonitored Sat-Sun.

GREEN BAY

L-31B

IAP



## NEW HUDSON

**OAKLAND SOUTHWEST** (Y47) 1 SW UTC-5(-4DT) N42°30.19' W83°37.42'

926 B S4 FUEL 100LL NOTAM FILE LAN

RWY 08-26: H3128X40 (ASPH) LIRL

RWY 08: VASI(V2R)—GA 3.0°. Thld dspcd 1266'. Brush.

RWY 26: VASI(V2L)—GA 3.0°. Thld dspcd 864'. Trees.

**AIRPORT REMARKS:** Attended 1330Z†—dusk. Occasional 4"-6" drop off on rwy and twy shoulders. Trees and brush in primary surface 70'-120' left and right. ACTIVATE LIRL Rwy 08-26 CTAF 5 times.

**COMMUNICATIONS:** CTAF/UNICOM 122.7

® DETROIT APP/DEP CON 127.5

**RADIO AIDS TO NAVIGATION:** NOTAM FILE LAN.

**SALEM (L) VORTAC** 114.3 SVM Chan 90 N42°24.53'

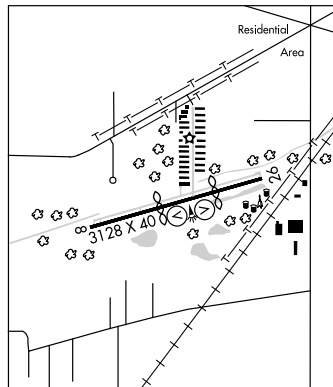
W83°35.65' 350° 5.8 NM to fld. 950/3W.

DETROIT

COPTER

L-28J, A

IAP





APP CRS  
**116°**

Rwy Idg **4304**  
TDZE **869**  
Apt Elev **869**

**RNAV (GPS) RWY 11**  
NEWBERRY / LUCE COUNTY (ERY)

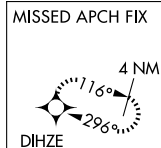
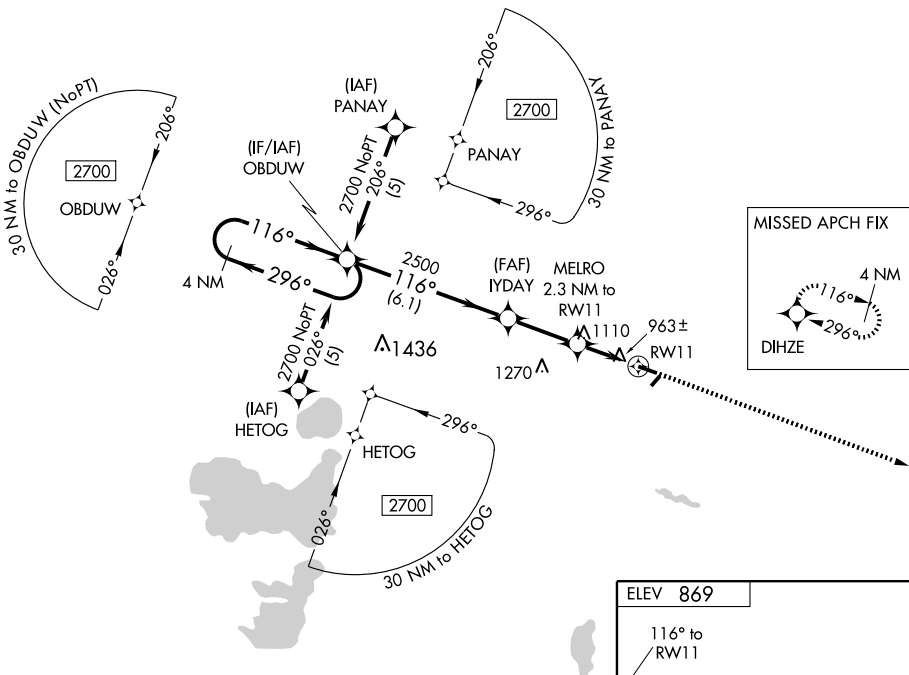
**▼** For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Chippewa Co Intl altimeter setting and increase DA 105 feet and all MDA 120 feet, increase LNAV/VNAV visibility ¼ mile all Cats, LNAV Cats C and D ½ mile, and Circling Cats C and D ¼ mile. Baro-VNAV NA when using Chippewa Co Intl altimeter setting.

**MISSED APPROACH:**  
Climb to 2700 direct  
DIHZE and hold.

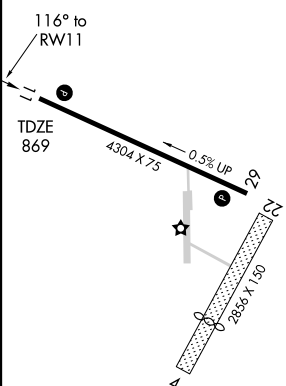
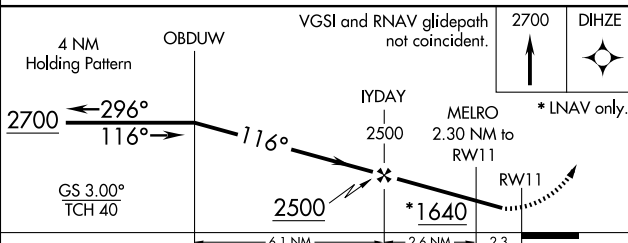
AWOS-3  
**108.2**

GREEN BAY RADIO  
**122.4**

UNICOM  
**122.8 (CTAF) 0**



ELEV 869



CATEGORY	A	B	C	D
LNAV/DA VNAV	1259-1½		390 (400-1½)	
LNAV MDA	1360-1 491 (500-1)		1360-1¼ 491 (500-1¼)	
CIRCLING	1360-1 491 (500-1)		1360-1½ 491 (500-1½)	

MIRL Rwy 11-29 0  
REIL Rwy 11 and 29 0

WAAS CH <b>40418</b> <b>W29A</b>	APP CRS <b>296°</b>	Rwy Idg TDZE Apt Elev	<b>4304</b> <b>867</b> <b>869</b>
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# RNAV (GPS) RWY 29

NEWBERRY/LUCE COUNTY (ERY)

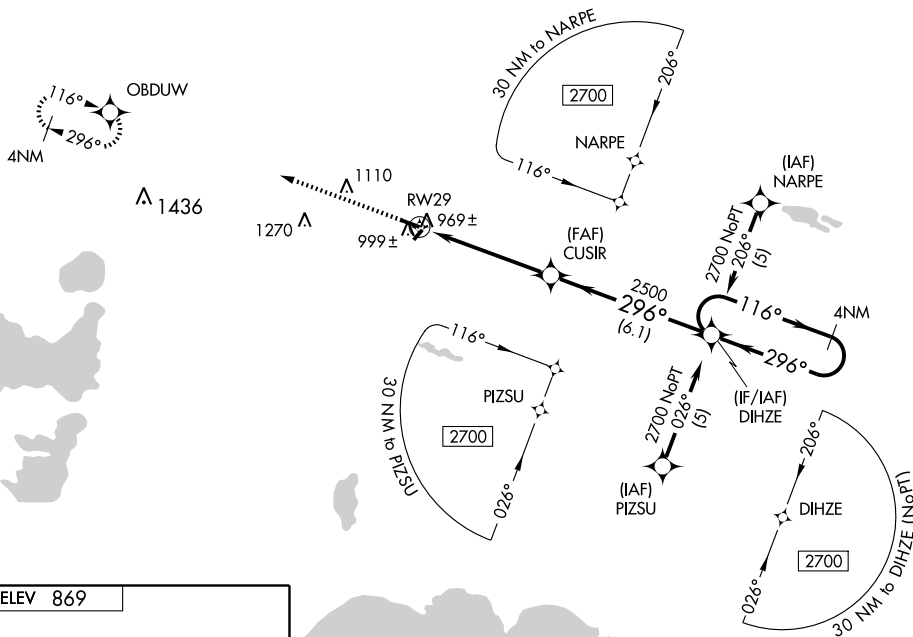
**▼** For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Chippewa Co Intl altimeter setting and increase all DA 105 feet and all MDA 120 feet, increase LPV and LNAV/VNAV visibility ¼ mile all Cats, LNAV Cats C and D ½ mile, and Circling Cat D ¼ mile. Baro-VNAV NA when using Chippewa Co Intl altimeter setting.

**MISSED APPROACH:**  
Climb to 2700 direct  
OBDUW and hold.

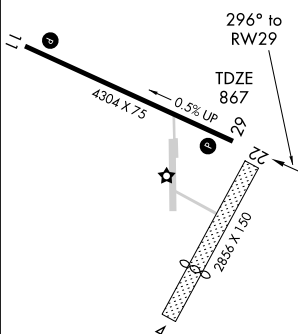
AWOS-3  
**108.2**

GREEN BAY RADIO  
**122.4**

UNICOM  
**122.8 (CTAF) 0**

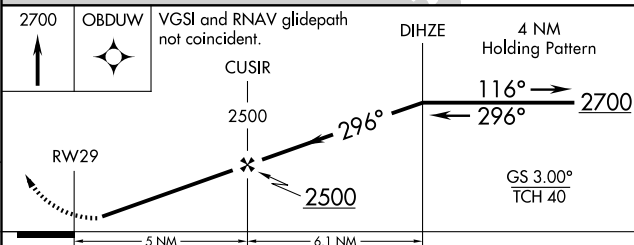


ELEV 869



MIRL Rwy 11-29 **0**  
REIL Rws 11 and 29 **0**

NEWBERRY, MICHIGAN  
Orig 29JUL10



CATEGORY	A	B	C	D
LPV DA	1117-1	250 (300-1)		
LNAV/VNAV DA	1239-1½	372 (400-1½)		
LNAV MDA	1260-1	393 (400-1)		1260-1¼ 393 (400-1¼)
CIRCLING	1300-1 431 (500-1)	1320-1 451 (500-1)	1320-1½ 451 (500-1½)	1420-2 551 (600-2)

46°19'N - 85°27'W

NEWBERRY/LUCE COUNTY (ERY)  
**RNAV (GPS) RWY 29**

VOR/DME ERY  
**108.2**  
Chan **19**

APP CRS  
**126°**

Rwy Idg **4304**  
TDZE **869**  
Apt Elev **869**

**VOR RWY 11**

NEWBERRY/LUCE COUNTY (ERY)

▼  
▲ NA

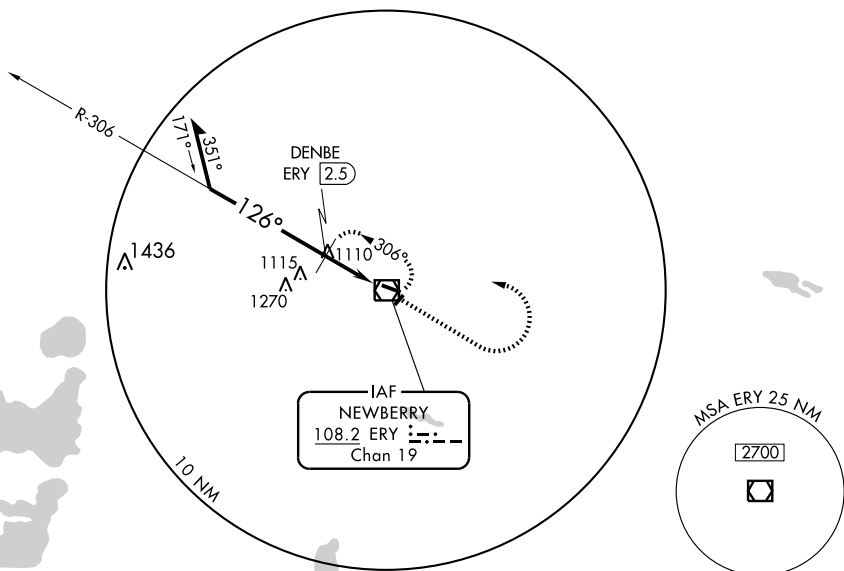
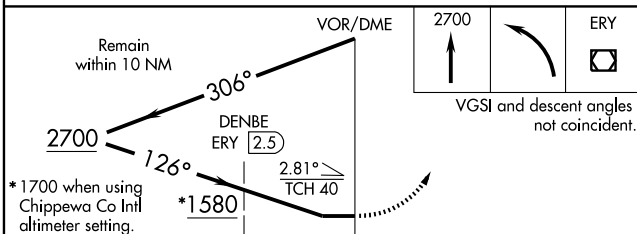
Visibility reduction by helicopters NA. When local altimeter setting not received, use Chippewa Co Intl altimeter setting and increase all MDA 120 feet, increase S-11 and Circling Cat B visibility ¼ mile, Cat C and D ½ mile, DENBE FIX minimums; Increase S-11 Cat C and D visibility ½ mile, Circling Cat C and D ¼ mile.

MISSED APPROACH:  
Climb to 2700 then left turn direct ERY VOR/DME and hold.

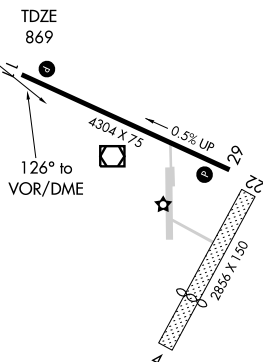
AWOS-3  
**108.2**

GREEN BAY RADIO  
**122.4**

UNICOM  
**122.8 (CTAF) 0**

ELEV **869**

VGS1 and descent angles  
not coincident.



CATEGORY	A	B	C	D
S-11	1580-1	711 (800-1)	1580-2 711 (800-2)	1580-2¼ 711 (800-2¼)
CIRCLING	1580-1	711 (800-1)	1580-2 711 (800-2)	1580-2¼ 711 (800-2¼)
DENBE FIX MINIMUMS				
S-11	1360-1	491 (500-1)	1360-1¼ 491 (500-1¼)	1360-1½ 491 (500-1½)
CIRCLING	1360-1	491 (500-1)	1360-1½ 491 (500-1½)	1420-2 551 (600-2)

MIRL Rwy 11-29  
REIL Rws 11 and 29

VOR/DME ERY <b>108.2</b> Chan <b>19</b>	APP CRS <b>289°</b>	Rwy Idg TDZE Apt Elev <b>4304</b> <b>867</b> <b>869</b>
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**VOR RWY 29**

NEWBERRY/LUCE COUNTY (ERY)

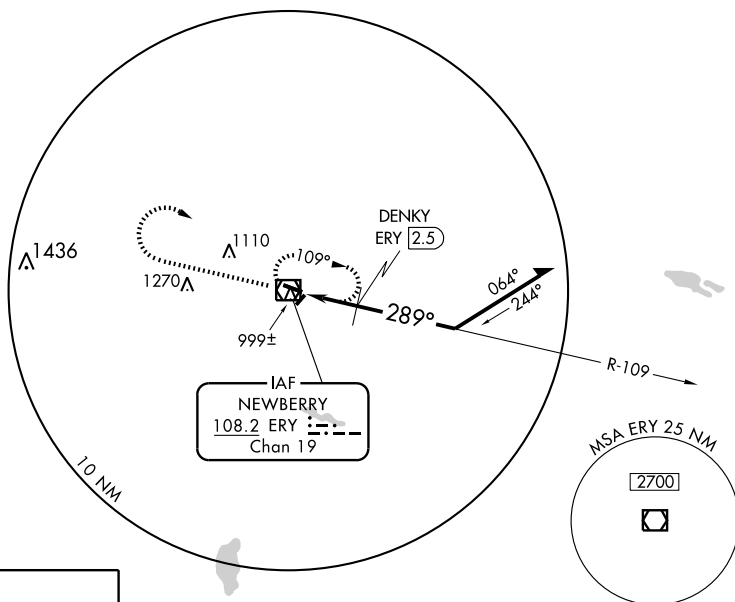
**⚠** **NA** Visibility reduction by helicopters NA. When local altimeter setting not received, use Chippewa Co Intl altimeter setting and increase all MDA 120 feet, increase S-29 Cat C and D visibility  $\frac{1}{4}$  mile, Circling Cat C and D  $\frac{1}{4}$  mile, DENKY FIX minimums; Increase S-29 Cat C and D visibility  $\frac{1}{2}$  mile and Circling Cat D visibility  $\frac{1}{4}$  mile.

**MISSED APPROACH:**  
Climb to 2500 then right turn direct ERY VOR/DME and hold.

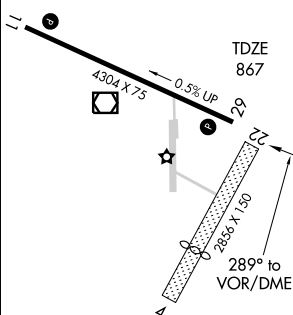
AWOS-3  
**108.2**

GREEN BAY RADIO  
**122.4**

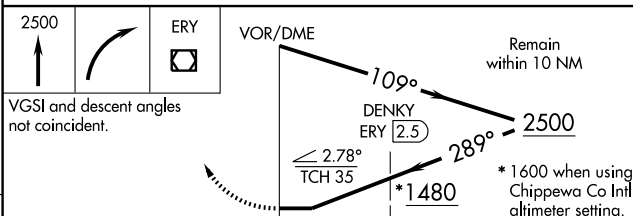
UNICOM  
**122.8 (CTAF) 0**



ELEV 869



MIRL Rwy 11-29 **0**  
REIL Rws 11 and 29 **0**



CATEGORY	A	B	C	D
S-29	1480-1	613 (700-1)	1480-1 $\frac{3}{4}$ 613 (700-1 $\frac{3}{4}$ )	1480-2 613 (700-2)
CIRCLING	1480-1	611 (700-1)	1480-1 $\frac{3}{4}$ 611 (700-1 $\frac{3}{4}$ )	1480-2 611 (700-2)
DENKY FIX MINIMUMS				
S-29	1260-1 393 (400-1)			1260-1 $\frac{1}{4}$ 393 (400-1 $\frac{1}{4}$ )
CIRCLING	1300-1 431 (500-1)	1320-1 451 (500-1)	1320-1 $\frac{1}{2}$ 451 (500-1 $\frac{1}{2}$ )	1420-2 551 (600-2)

NEWBERRY, MICHIGAN  
Amdt 12 29JUL10

NEWBERRY/LUCE COUNTY (ERY)

46°19'N - 85°27'W

**VOR RWY 29**

## NILES

**JERRY TYLER MEMORIAL** (3TR) 2 NE UTC-5(-4DT) N41°50.15' W86°13.51'

CHICAGO

750 B S4 FUEL 100LL, JET A TPA—See Remarks. NOTAM FILE LAN

L-281

RWY 15-33: H4100X75 (ASPH) S-25 MIRL

IAP

RWY 15: REIL. Thld dspcd 300'. Road.

RWY 33: REIL. Trees.

RWY 04-22: H3315X50 (ASPH) S-8

RWY 04: Thld dspcd 900'. Road.

RWY 22: Thld dspcd 750'. Trees.

**AIRPORT REMARKS:** Attended 1400-2200Z. Arpt unattended major holidays. Rwy 04-22 pavement cracked and broken. +51 obstruction lgtd poles, in Rwy 15 transition zone. Trees between Rwy 04 and Rwy 33 and between Rwy 33 and Rwy 22 obstruct view of Rwy ends. Rwy 04 +51' tree, 290' distance, 120' left, apch ratio 2:1. REIL Rwy 15 and Rwy 33 OTS indef. TPA piston acft 1750(1000), turbine acft 2250(1500). ACTIVATE MIRL Rwy 15-33, REILS Rwy 15 and Rwy 33—CTAF.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

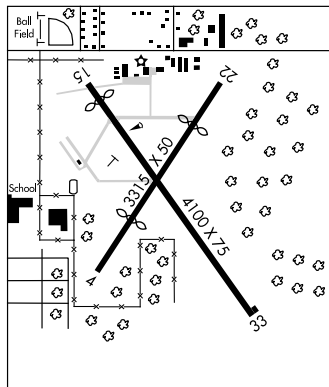
Ⓡ **SOUTH BEND APP/DEP CON** 118.55 (Sun-Fri 1030-0500Z, Sat 1030-0445Z), other times ctc

Ⓡ **CHICAGO CENTER APP/DEP CON** 127.55

GCO 121.725 (SOUTH BEND CLNC and FLIGHT SERVICES)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE LAN.

GIPPER (H) VORTACW 115.4 GIJ Chan 101 N41°46.12' W86°19.11' 046° 5.8 NM to fld. 804/00E. HIWAS



## NORTHPORT

**WOOLSEY MEMORIAL** (5D5) 3 NE UTC-5(-4DT) N45°09.86' W85°34.53'

GREEN BAY

628 NOTAM FILE LAN

RWY 09-27: 3663X120 (TURF) LIRL

RWY 09: Thld dspcd 266'. Road.

RWY 27: Trees.

RWY 16-34: 2670X150 (TURF)

RWY 16: Thld dspcd 800'. Trees.

RWY 34: Thld dspcd 269'. Trees.

**AIRPORT REMARKS:** Unattended. Arpt CLOSED Nov-Mar and when snow covered. Birds and deer on and invof arpt. Rwy 09-27 slopes up E to W, and Rwy 16-34 slopes up N to S. Rwy 09-27 and Rwy 16-34 and dspcd thlds marked with 3' yellow cones. ACTIVATE LIRL Rwy 09-27—122.9.

**COMMUNICATIONS:** CTAF 122.9

## NUNICA

**HAT FIELD** (5N7) 2 NW UTC-5(-4DT) N43°05.83' W86°05.68'

CHICAGO

625 S4 NOTAM FILE LAN.

RWY 08-26: 3600X100 (TURF)

RWY 08: Thld dspcd 600'. Trees.

RWY 26: Thld dspcd 1200'. Tree.

**AIRPORT REMARKS:** Attended irregularly. Arpt CLOSED Nov thru Mar. Deer and birds on and invof arpt. Rwy 08-26 and dspcd thlds marked with 3' yellow cones.

**COMMUNICATIONS:** CTAF 122.9

**JABLONSKI** (33C) 1 W UTC-5(-4DT) N43°04.94' W86°05.69'

CHICAGO

634 NOTAM FILE LAN

RWY 09-27: 2995X100 (TURF) LIRL

RWY 09: Thld dspcd 998'. Tree.

RWY 27: Thld dspcd 796'. Fence.

**AIRPORT REMARKS:** Attended irregularly. Deer on and invof rwys. Rwy 09-27 rough with mole hills. For LIRL Rwy 09-27 call arpt manager 616-837-6282. Rwy 09-27 and dspcd thlds marked with 3' yellow cones.

**COMMUNICATIONS:** CTAF 122.9

**OAKLAND CO INTL** (See PONTIAC)

**OAKLAND SOUTHWEST** (See NEW HUDSON)

**OAKLAND TROY** (See TROY)

**OCEANA CO** (See HART/SHELBY)

**OJIBWA AIRPARK** (See WEIDMAN)

**OLSTE** N43°27.69' W84°10.79' NOTAM FILE MBS.

DETROIT

NDB (LOM) 257 MB 050° 6.1 NM to MBS Intl. Unmonitored. Unusable byd 10 NM and between 150°-180°.

VORTAC GJ <b>115.4</b> Chan <b>101</b>	APP CRS <b>046°</b>	Rwy Idg <b>2415</b> TDZE <b>743</b> Apt Elev <b>750</b>
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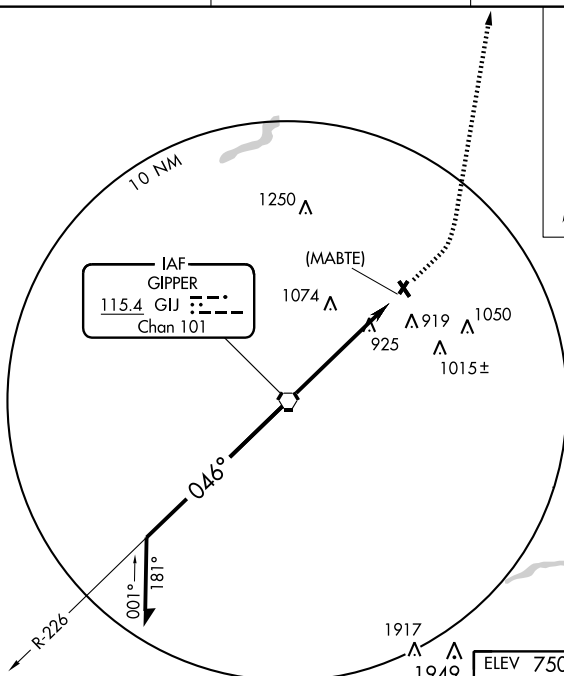
VOR or GPS RWY 4  
NILES / JERRY TYLER MEMORIAL (3TR)

**T** Use South Bend altimeter setting.  
**A NA** Straight-in minimums not authorized at night.

**MISSED APPROACH:** Climb to 2500, then left turn direct ELX VOR/DME and hold.

SOUTH BEND APP CON★  
118.55 257.8

GCO  
121.725

UNICOM  
122.8 (CTAF) **L**

MISSED APCH FIX

KEELER  
116.6 ELX  
Chan 113

MSA GIJ 25 NM

3000

ELEV 750

Remain  
within 10 NM

VORTAC

2500 ————— 046° ————— 2500

(MABTE)  
GJJ 5.5

046° 5.5 NM  
from FAF

MIRL Rwy 15-33 **L**  
REIL Rwy 15 and 33 **L**

FAF to MAP 5.5 NM

CATEGORY	A	B	C	D
S-4	1200-1	457 (500-1)	1200-1¼ 457 (500-1¼)	1200-1½ 457 (500-1½)
CIRCLING	1300-1	557 (600-1)	1300-1½ 557 (600-1½)	1460-2¼ 717 (800-2¼)

Knots	60	90	120	150	180
Min:Sec	5:30	3:40	2:45	2:12	1:50

VORTAC GJ	APP CRS	Rwy Idg	2565
<b>115.4</b>	<b>225°</b>	TDZE	<b>743</b>
Chan <b>101</b>		Apt Elev	<b>750</b>

# VOR or GPS RWY 22

NILES / JERRY TYLER MEMORIAL (3TR)

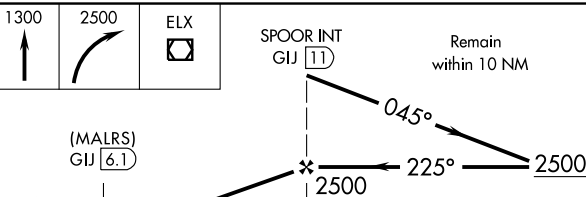
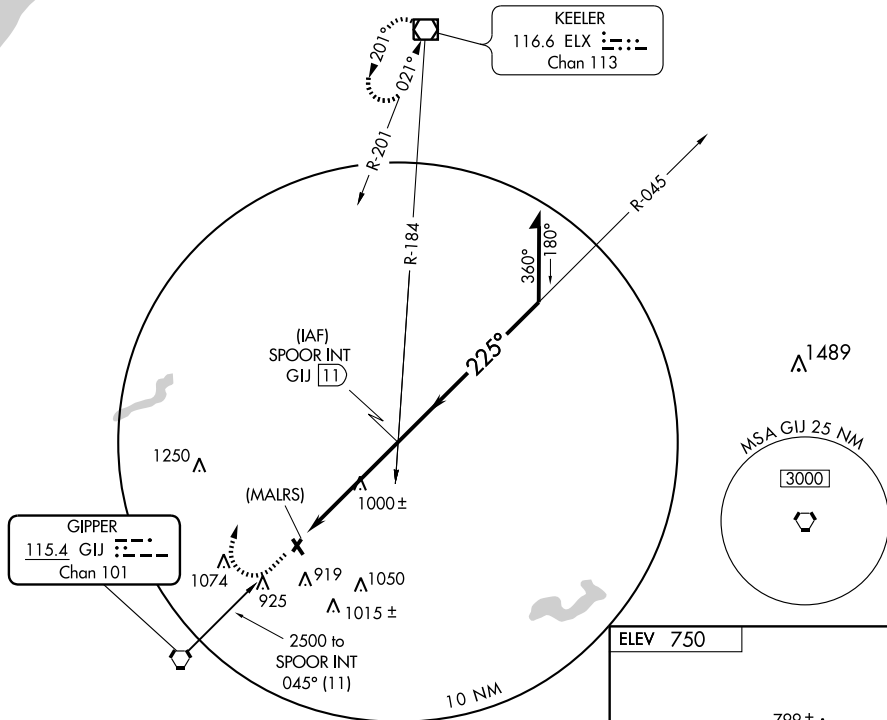
▼ Use South Bend altimeter setting.  
 ▲ NA Straight-in minimums not authorized at night.

MISSED APPROACH: Climb to 1300, then climbing right turn to 2500 direct ELX VOR/DME and hold.

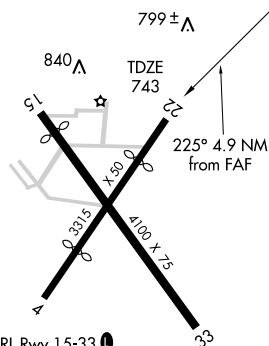
SOUTH BEND APP CON ★  
**118.55 257.8**

GCO  
**121.725**

UNICOM  
**122.8 (CTAF) 0**



ELEV 750



CATEGORY	A	B	C	D
S-22	1280-1 537 (600-1)		1280-1½ 537 (600-1½)	1280-1¾ 537 (600-1¾)
CIRCLING	1300-1 557 (600-1)		1300-1½ 557 (600-1½)	1460-2¼ 717 (800-2¼)

MIRL Rwy 15-33 **L** 33  
REIL Rwy 15 and 33 **L**

FAF to MAP 4.9 NM					
Knots	60	90	120	150	180
Min:Sec	4:54	3:16	2:27	1:58	1:38

## ONAWAY

LEO E. GOETZ CO (Y96) 1 N UTC-5(-4DT) N45°22.25' W84°13.50'

LAKE HURON

830 B NOTAM FILE LAN

RWY 15-33: H2600X60 (ASPH) MIRL

RWY 15: Road. RWY 33: Trees.

RWY 03-21: 1400X100 (TURF)

RWY 03: Trees. RWY 21: Trees.

**AIRPORT REMARKS:** Unattended. Confirm snow removal and winter conditions phone 989-734-2216; or arpt manager residence 989-734-4309. 11' p-line 750' from thld 125' R of centerline. Rwy 03-21 marked with 3' yellow cones.

COMMUNICATIONS: CTAF 122.9

## ONONDAGA

GORILLA (11J) 2 SW UTC-5(-4DT) N42°25.50' W84°34.68'

DETROIT

980 NOTAM FILE LAN

Not insp

HELIPAD H1: 75X50 (TURF)

**HELIPORT REMARKS:** Attended irregularly. Marked with yellow steel plates. 45' trees 180'W of pad.

COMMUNICATIONS: CTAF 122.9

ONTONAGON CO-SCHUSTER FLD (OGM) 3 W UTC-5(-4DT) N46°50.73' W89°22.03'

GREEN BAY

669 B FUEL 100LL NOTAM FILE GRB

L-14J

RWY 17-35: H3500X75 (ASPH-AFSC) S-12 MIRL 0.7% up S

IAP

RWY 17: REIL. PAPI(P2L) - GA 3.45° TCH 25'. Trees.

RWY 35: REIL. PAPI(P2L) - GA 3.45° TCH 25'. Trees.

**AIRPORT REMARKS:** Unattended. 24 hr self serve fuel with VISA or Master Charge. Deer and birds on and in/ov arpt. MIRL Rwy 17-35 and PAPI Rwy 17 and Rwy 35 dusk-0400Z+; after 0400Z+ ACTIVATE-CTAF.

COMMUNICATIONS: CTAF 122.9

® MINNEAPOLIS CENTER APP/DEP CON 127.2

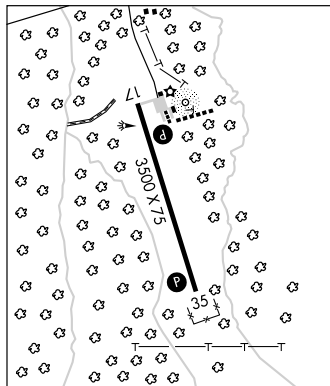
RADIO AIDS TO NAVIGATION: NOTAM FILE IWD.

IRONWOOD (L) VORTACW 108.8 IWD Chan 25 N46°31.94'

W90°07.55' 058° 36.6 NM to fld. 1230/1E. HIWAS.

NDB (MHW) 375 OGM N46°51.01' W89°21.91' at fld.

Unmonitored. NOTAM FILE GRB.





NDB OGM <b>375</b>	APP CRS <b>222°</b>	Rwy Idg TDZE Apt Elev	N/A N/A <b>669</b>
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**NDB or GPS-A**

ONTONAGON COUNTY - SCHUSTER FIELD (OGM)

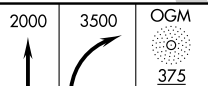
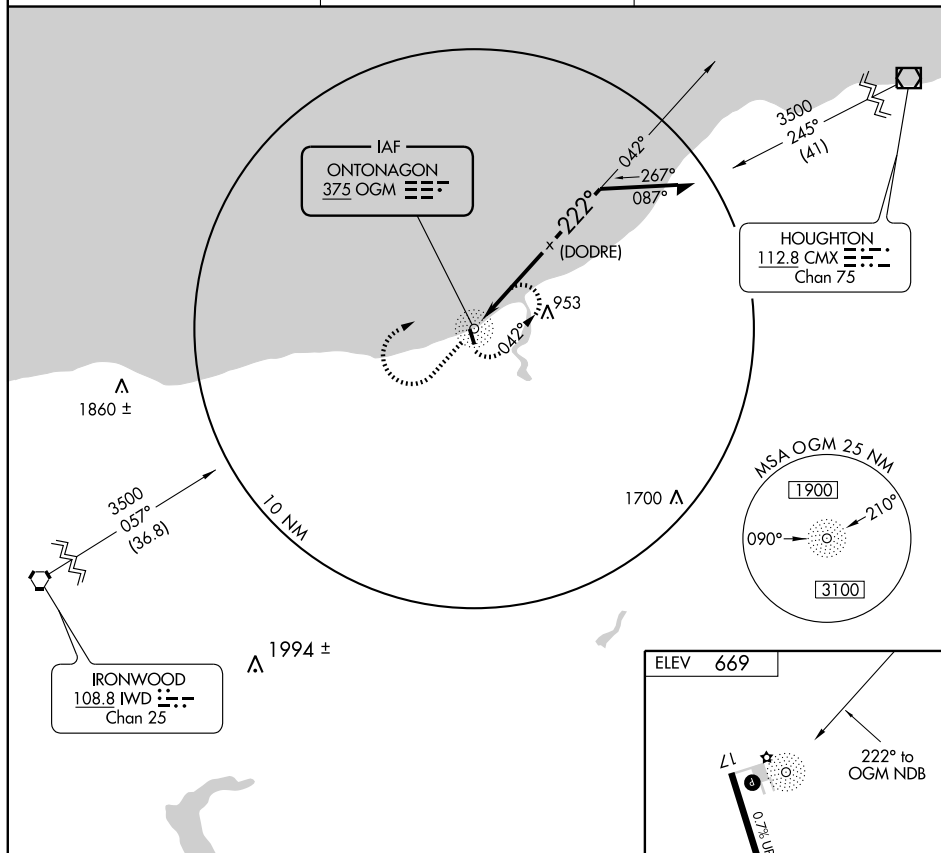
▼  
▲ NA  
Use Hancock altimeter setting, if not received  
procedure NA.

MISSED APPROACH: Climb to 2000, then climbing right turn  
to 3500 direct OGM NDB and hold.

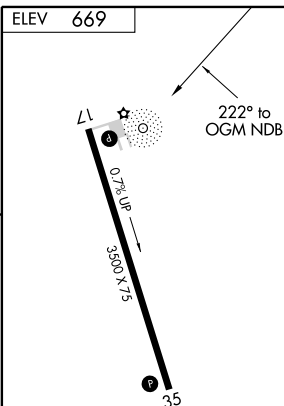
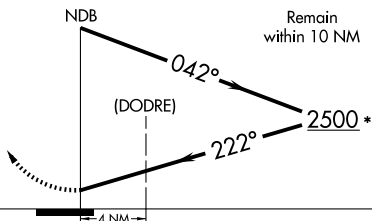
HANCOCK ASOS  
**125.675**

MINNEAPOLIS CENTER  
**127.2 379.1**

(CTAF)  
**122.9 0**



\* Maintain 3500 until  
established outbound  
on procedure turn.



CATEGORY	A	B	C	D
CIRCLING	1460-1 791 (800-1)	1460-1 ¼ 791 (800-1 ¼)	1460-2 ¼ 791 (800-2 ¼)	NA

MIRL Rwy 17-35  
REIL Rws 17 and 35

**OSCODA—WURTSMITH** (OSC) 3 NW UTC-5(-4DT) N44°27.09' W83°23.65'

633 B S4 FUEL 100LL, JET A OX 2 NOTAM FILE OSC

RWY 06-24: H11800X200 (ASPH-GRVD) S-155, D-330, 2S-175,  
2D-550 HIRL

RWY 06: PAPI(P4L)—GA 3.0° TCH 75'. Tree.

RWY 24: MALSR. PAPI(P4L)—GA 3.0° TCH 72'.

**AIRPORT REMARKS:** Attended Mon-Fri dawn-dusk. During daylight winds may exist over approach ends Rwy 06 and Rwy 24 simultaneously. Seagulls and migratory birds on and in vicinity of airport. Be alert for potential jet blast on Rwy A in vicinity of taxi ramp. ACTIVATE HIRL Rwy 06-24, PAPI Rwy 06 and Rwy 24 and MALSR Rwy 24—CTAF.

WEATHER DATA SOURCES: AWOS-3 116.1 ASP (989) 739-1310

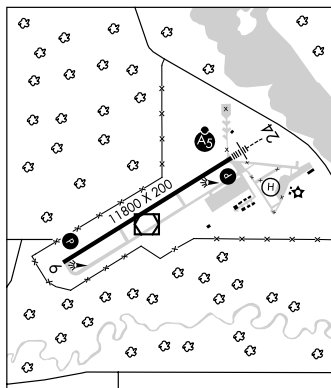
COMMUNICATIONS: CTAF/UNICOM 123.0

MINNEAPOLIS CENTER APP/DEP CON 125.475

RADIO AIDS TO NAVIGATION: NOTAM FILE OSC.

AU SABLE (H) VORW/DME 116.1 ASP Chan 108 N44°26.95'  
W83°23.66' at fld. 625/7W. AWOS-3.

ILS 108.5 I-LJU Rwy 24. LOC and Glide Slope unmonitored.



LAKE HURON

H-11A, L-31C

IAP

**OTTAWA EXECUTIVE** (See ZEELAND)**OWOSSO COMMUNITY** (RNP) 2 E UTC-5(-4DT) N42°59.58' W84°08.31'

736 B S4 FUEL 100LL NOTAM FILE RNP

RWY 10-28: H4300X75 (ASPH) S-18 MIRL

RWY 10: REIL. PAPI(P4L)—GA 3.0° TCH 20'. Trees.

RWY 28: REIL. PAPI(P4L)—GA 4.0° TCH 20'. Trees.

RWY 18-36: 2599X260 (TURF)

RWY 18: Thld disp'd 396'. Bldg.

RWY 36: Thld disp'd 990'. Trees.

RWY 06-24: 2483X130 (TURF)

RWY 06: PAPI(P4R)—GA 3.5° TCH 25'. Thld disp'd 1057'. Trees.

RWY 24: Pole.

**AIRPORT REMARKS:** Attended 1400-2200Z+. Rwy 06-24 and Rwy 18-36 CLOSED Dec 1 thru Mar 31 and when snow covered. Deer and birds on and in vicinity of airport. Rwy 10-28 has numerous cracks. Rwy 06-24 and Rwy 18-36 marked with cones; Rwy 06; Rwy 18; Rwy 36 disp'd thlds marked with 3 cones each side. ACTIVATE MRL Rwy 10-28, PAPI Rwy 10 and 28 and REIL Rwy 10 and Rwy 28—CTAF.

WEATHER DATA SOURCES: AWOS-3 118.025 (989) 729-2967.

COMMUNICATIONS: CTAF/UNICOM 123.0

FLINT RCO 122.3 (LANSING RADIO)

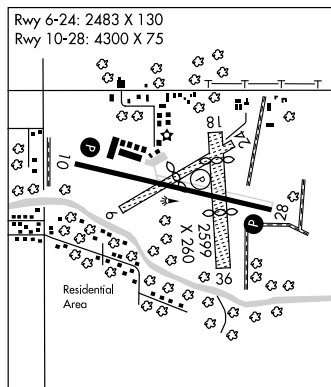
Ⓡ FLINT APP/DEP CON 128.55 (N/W of active rwy) 118.8 (E/S of active rwy) (1045-0430Z+)

CLEVELAND CENTER APP/DEP CON 126.75 (0430-1045Z+)

RADIO AIDS TO NAVIGATION: NOTAM FILE FNT.

FLINT (H) VORTACW 116.9 FNT Chan 116 N42°58.01' W83°44.82' 281° 17.3 NM to fld. 772/6W.

COMM/NAV/WEATHER REMARKS: APP CON sectorization based upon Flint rwy usage.



DETROIT

L-28J

IAP

**PADGHAM FLD** (See ALLEGAN)**PARCHMENT****TRIPLE H** (2H4) 3N UTC-5(-4DT) N42°21.92' W85°33.35'

785 NOTAM FILE LAN

RWY 01-19: 2400X100 (TURF)

RWY 01: Thld disp'd 400'. Tree. Rgt tfc. RWY 19: Thld disp'd 968'. Trees.

RWY 09-27: 2600X100 (TURF)

RWY 09: Trees. Rgt tfc. RWY 27: Thld disp'd 1200'. Trees.

**AIRPORT REMARKS:** Attended irregularly. Deer in vicinity of airport. Rwy 09-27, 80' trees along both rwy edges. Rwy 09-27 fence at west end. Rwy 01-19 and disp'd thlds marked with 3' yellow cones. Rwy 09-27 and disp'd thld marked with yellow cones. Rwy 01-19 NSTD LIRL not for public use.

COMMUNICATIONS: CTAF: 122.9

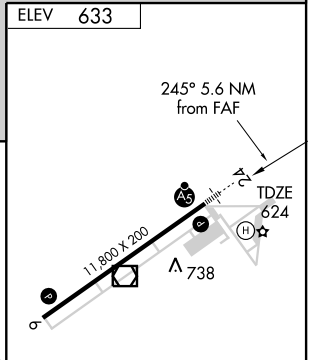
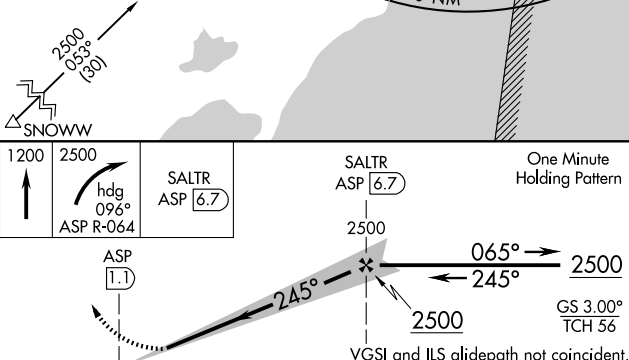
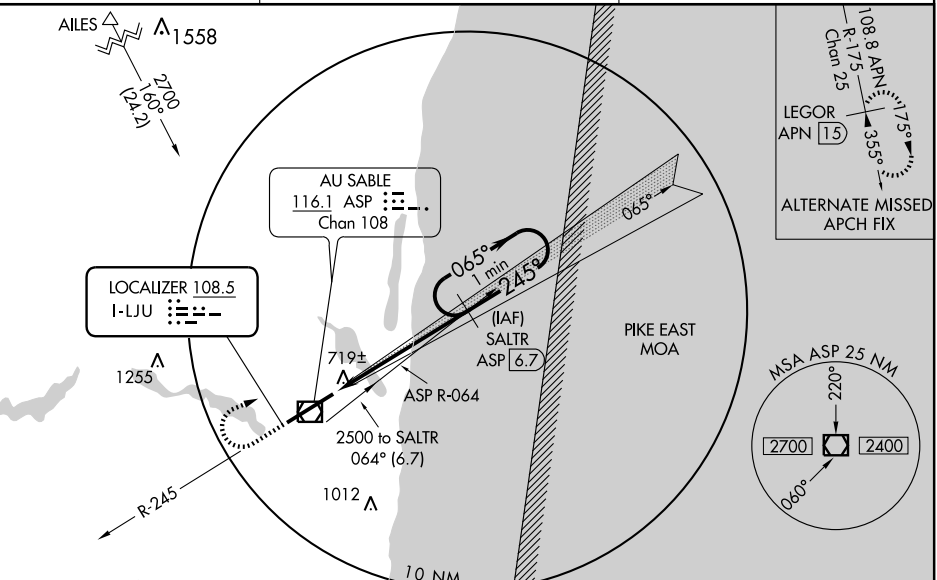
CHICAGO

LOC 1-LJU <b>108.5</b>	APP CRS <b>245°</b>	Rwy Idg <b>11,800</b> TDZE <b>624</b> Apt Elev <b>633</b>
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# ILS or LOC/DME RWY 24 OSCODA-WURTSMITH (OSC)

<p><b>NA</b></p> <p>Circling NA southeast of Rwy 6-24. DME from ASP VOR/DME. Simultaneous reception of 1-LJU and ASP DME required. When local altimeter setting not received, use Alpena altimeter setting and increase all DA 96 feet and all MDA 100 feet and increase S-LOC 24 Cat C and D visibility ¼ mile, and increase circling Cat C visibility ¼ mile. For inoperative MALSRS when using Alpena altimeter setting increase S-ILS all Cats visibility to 1 mile.</p>	<p><b>MALSRS</b></p> <p><b>AS</b></p>	<p><b>MISSED APPROACH:</b> Climb to 1200 then climbing right turn to 2500 via heading 096° and ASP VOR/DME R-064 to SALTR/ASP 6.7 DME and hold.</p>
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<b>AWOS-3</b> <b>116.1</b>	<b>MINNEAPOLIS CENTER</b> <b>125.475 269.45</b>	<b>UNICOM</b> <b>123.0 (CTAF) 0</b>
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CATEGORY	A	B	C	D
S-ILS 24		824-1/2	200 (200-1/2)	
S-LOC 24		980-1/2	356 (400-1/2)	980-3/4 356 (400-3/4)
CIRCLING	1140-1	507 (600-1)	1140-1/2 507 (600-1/2)	1200-2 567 (600-2)



WAAS CH <b>97417</b> <b>W06A</b>	APP CRS <b>065°</b>	Rwy Idg <b>11,800</b> TDZE <b>633</b> Apt Elev <b>633</b>
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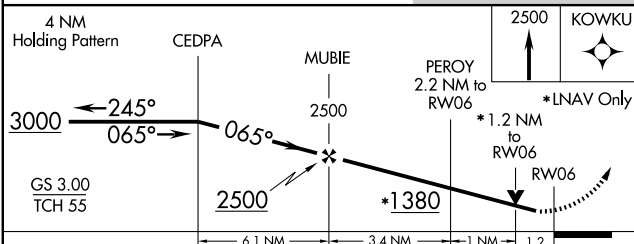
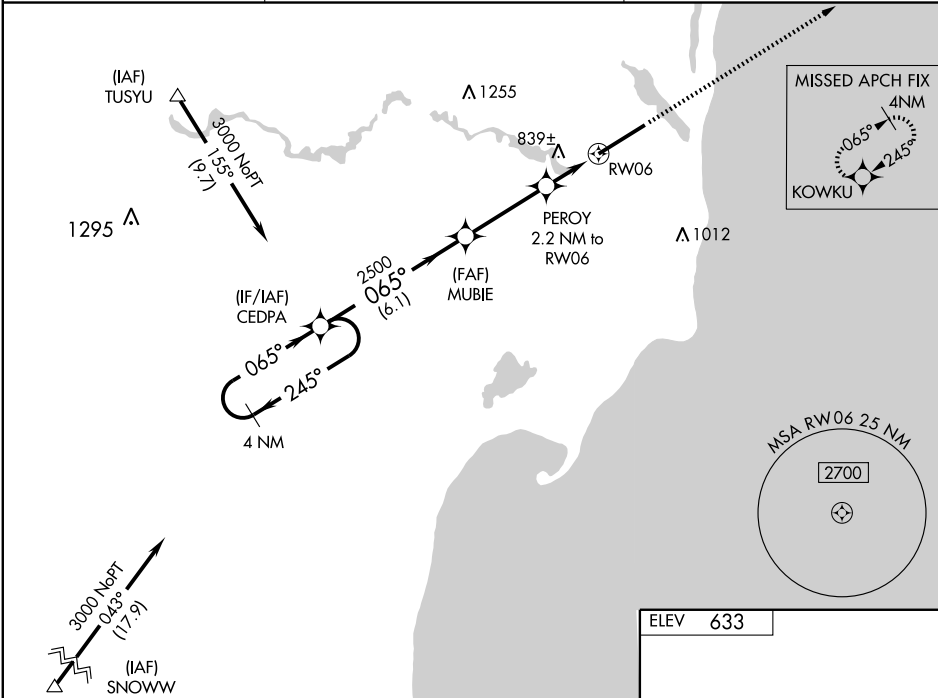
# **RNAV (GPS) RWY 6** OSCODA-WURTSMITH (OSC)



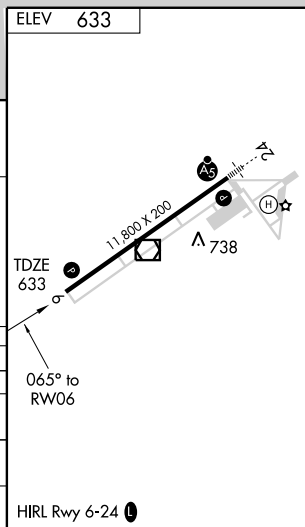
Circling NA southeast of Rwy 6-24. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. VDP NA with Alpena altimeter setting. Baro-VNAV NA when using Alpena altimeter setting. When local altimeter setting not received use Alpena altimeter setting and increase all DA 96 feet and all MDA 100 feet and increase LPV and LNAV/VNAV all Cats visibility ½ mile, and LNAV Cat C and D and circling Cat C visibility ¼ mile.

**MISSED APPROACH:**  
Climb to 2500 direct KOWKU and hold.

AWOS-3 <b>116.1</b>	MINNEAPOLIS CENTER <b>125.475 269.45</b>	UNICOM <b>123.0 (CTAF) 0</b>
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CATEGORY	A	B	C	D
LPV DA	892-3/4 259 (300-3/4)			
LNAV/ VNAV DA	1148-1 3/4 515 (600-1 3/4)			
LNAV MDA	1080-1	447 (500-1)	1080-1 1/4 447 (500-1 1/4)	1080-1 1/2 447 (500-1 1/2)
CIRCLING	1140-1	507 (600-1)	1140-1 1/2 507 (600-1 1/2)	1200-2 567 (600-2)



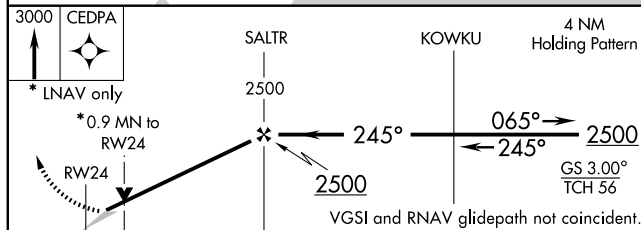
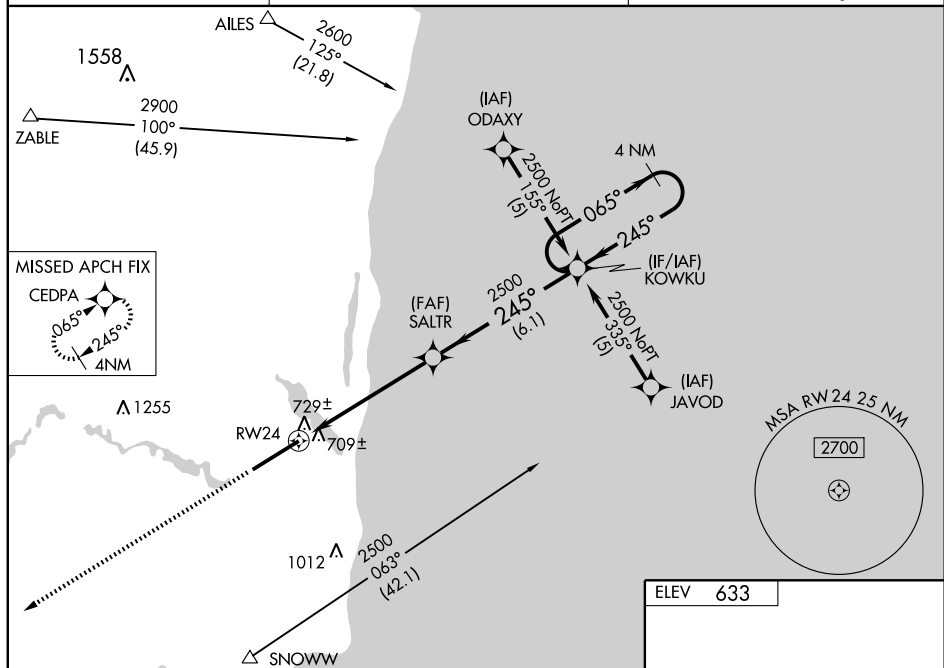
WAAS CH <b>82317</b> <b>W24A</b>	APP CRS <b>245°</b>	Rwy Idg <b>11,800</b> TDZE <b>624</b> Apt Elev <b>633</b>
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# RNAV (GPS) RWY 24 OSCODA-WURTSMITH (OSC)

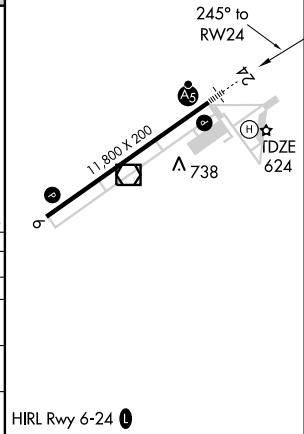
**▼** Circling NA southeast of Rwy 6-24. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Alpena altimeter setting and increase all DA 96 feet and all MDA 100 feet and increase LNAV/VNAV all Cats visibility ½ mile, and increase LNAV and circling Cat C visibility ¼ mile. VDP NA with Alpena altimeter setting. Baro-VNAV NA when using Alpena altimeter setting. For inoperative MALS, increase LNAV Cat D visibility to 1¼ mile. For inoperative MALS when using Alpena altimeter setting increase LPV all Cats visibility to 1 mile.

**MALS**  
**A5**  
MISSED APPROACH:  
Climb to 3000 direct  
CEDPA and hold.

AWOS-3 <b>116.1</b>	MINNEAPOLIS CENTER <b>125.475 269.45</b>	UNICOM <b>123.0 (CTAF) ①</b>
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CATEGORY	A	B	C	D
LPV DA	824-½	200 (200-½)		
LNAV/VNAV DA	1004-¾	380 (400-¾)		
LNAV MDA	980-½	356 (400-½)	980-1	356 (400-1)
CIRCLING	1140-1	507 (600-1)	1140-1½	507 (600-1½)
			1200-2	567 (600-2)



VOR/DME ASP <b>116.1</b> Chan <b>108</b>	APP CRS <b>070°</b>	Rwy Idg <b>11,800</b> TDZE <b>634</b> Apt Elev <b>634</b>
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# VOR RWY 6

OSCODA-WURTSMITH (OSC)

**▼** Circling NA southeast of Rwy 6 and 24. VDP NA when using Alpena altimeter setting. When local altimeter setting not received, use Alpena altimeter setting and increase all MDAs 100 feet and DOGSY Fix minimums visibility S-6/Circling Cat C ¼ mile, S-6 Cat D ¼ mile.

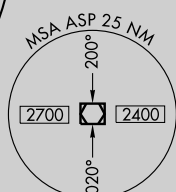
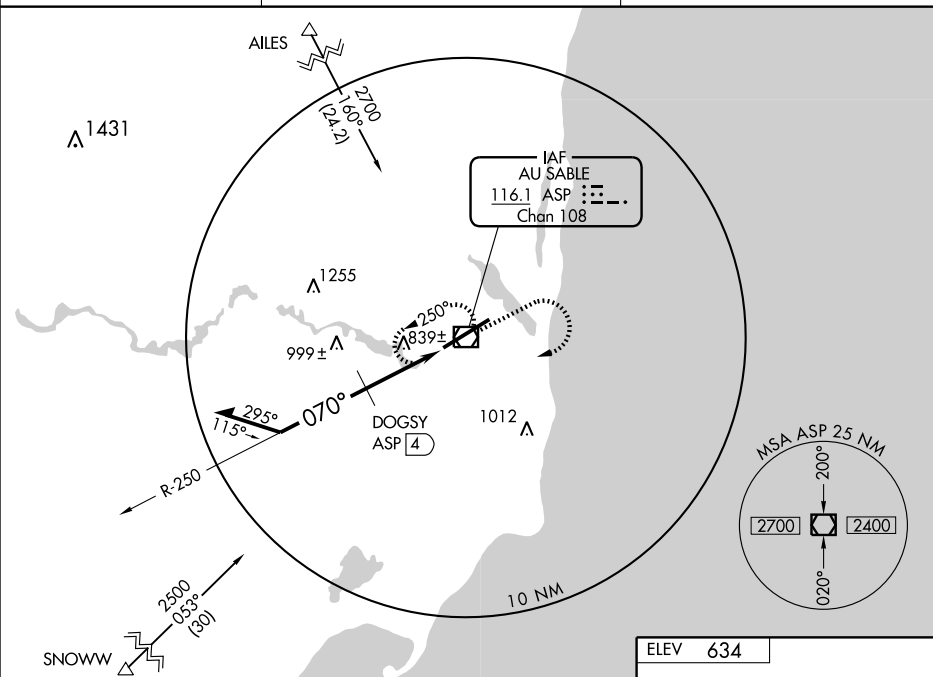
**▲ NA**

**MISSED APPROACH:** Climb to 2500 then right turn direct ASP VOR/DME and hold.

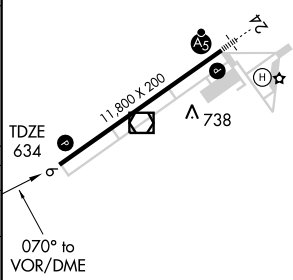
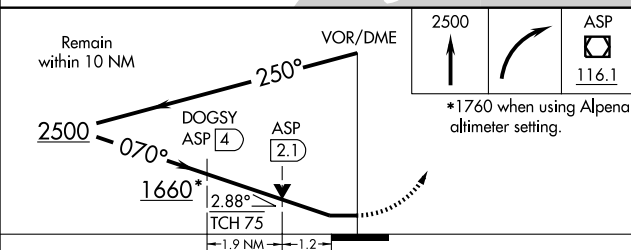
AWOS-3  
**116.1**

MINNEAPOLIS CENTER  
**125.475 269.45**

UNICOM  
**123.0 (CTAF) 0**



ELEV **634**



CATEGORY	A	B	C	D
S-6	1660-1¼ 1026 (1100-1¼)	1660-1½ 1026 (1100-1½)	1660-3	1026 (1100-3)
CIRCLING	1660-1¼ 1026 (1100-1¼)	1660-1½ 1026 (1100-1½)	1660-3	1026 (1100-3)
DOGSY FIX MINIMUMS				
S-6	1100-1	466 (500-1)	1100-1¼ 466 (500-1¼)	1100-1½ 466 (500-1½)
CIRCLING	1140-1	506 (600-1)	1140-1½ 506 (600-1½)	1200-2 566 (600-2)

HIRL Rwy 6-24 **0**

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010

**OSCODA—WURTSMITH** (OSC) 3 NW UTC-5(-4DT) N44°27.09' W83°23.65'

633 B S4 FUEL 100LL, JET A OX 2 NOTAM FILE OSC

RWY 06-24: H11800X200 (ASPH-GRVD) S-155, D-330, 2S-175,  
2D-550 HIRL

RWY 06: PAPI(P4L)—GA 3.0° TCH 75'. Tree.

RWY 24: MALSR. PAPI(P4L)—GA 3.0° TCH 72'.

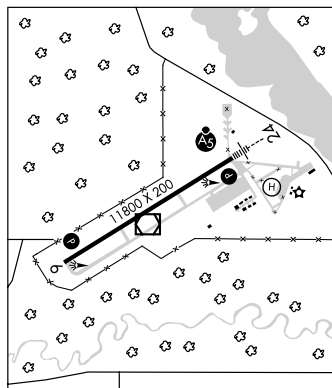
**AIRPORT REMARKS:** Attended Mon-Fri dawn-dusk. During daylight winds may exist over approach ends Rwy 06 and Rwy 24 simultaneously. Seagulls and migratory birds on and in vicinity of airport. Be alert for potential jet blast on Rwy A in vicinity of taxi ramp. ACTIVATE HIRL Rwy 06-24, PAPI Rwy 06 and Rwy 24 and MALSR Rwy 24—CTAF.

**WEATHER DATA SOURCES:** AWOS-3 116.1 ASP (989) 739-1310**COMMUNICATIONS:** CTAF/UNICOM 123.0

MINNEAPOLIS CENTER APP/DEP CON 125.475

**RADIO AIDS TO NAVIGATION:** NOTAM FILE OSC.AU SABLE (H) VORW/DME 116.1 ASP Chan 108 N44°26.95'  
W83°23.66' at fld. 625/7W. AWOS-3.

ILS 108.5 I-LJU Rwy 24. LOC and Glide Slope unmonitored.



LAKE HURON

H-11A, L-31C

IAP

**OTTAWA EXECUTIVE** (See ZEELAND)**OWOSSO COMMUNITY** (RNP) 2 E UTC-5(-4DT) N42°59.58' W84°08.31'

736 B S4 FUEL 100LL NOTAM FILE RNP

RWY 10-28: H4300X75 (ASPH) S-18 MIRL

RWY 10: REIL. PAPI(P4L)—GA 3.0° TCH 20'. Trees.

RWY 28: REIL. PAPI(P4L)—GA 4.0° TCH 20'. Trees.

RWY 18-36: 2599X260 (TURF)

RWY 18: Thld disp'd 396'. Bldg.

RWY 36: Thld disp'd 990'. Trees.

RWY 06-24: 2483X130 (TURF)

RWY 06: PAPI(P4R)—GA 3.5° TCH 25'. Thld disp'd 1057'. Trees.

RWY 24: Pole.

**AIRPORT REMARKS:** Attended 1400-2200Z+. Rwy 06-24 and Rwy 18-36 CLOSED Dec 1 thru Mar 31 and when snow covered. Deer and birds on and in vicinity of airport. Rwy 10-28 has numerous cracks. Rwy 06-24 and Rwy 18-36 marked with cones; Rwy 06; Rwy 18; Rwy 36 disp'd thlds marked with 3 cones each side. ACTIVATE MRL Rwy 10-28, PAPI Rwy 10 and 28 and REIL Rwy 10 and Rwy 28—CTAF.

**WEATHER DATA SOURCES:** AWOS-3 118.025 (989) 729-2967.**COMMUNICATIONS:** CTAF/UNICOM 123.0

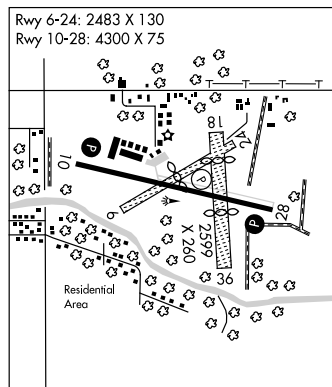
FLINT RCO 122.3 (LANSING RADIO)

Ⓡ FLINT APP/DEP CON 128.55 (N/W of active rwy) 118.8 (E/S of active rwy) (1045-0430Z+)

CLEVELAND CENTER APP/DEP CON 126.75 (0430-1045Z+)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE FNT.

FLINT (H) VORTACW 116.9 FNT Chan 116 N42°58.01' W83°44.82' 281° 17.3 NM to fld. 772/6W.

**COMM/NAV/WEATHER REMARKS:** APP CON sectorization based upon Flint rwy usage.

DETROIT

L-28J

IAP

**PADGHAM FLD** (See ALLEGAN)**PARCHMENT****TRIPLE H** (2H4) 3N UTC-5(-4DT) N42°21.92' W85°33.35'

785 NOTAM FILE LAN

RWY 01-19: 2400X100 (TURF)

RWY 01: Thld disp'd 400'. Tree. Rgt tfc. RWY 19: Thld disp'd 968'. Trees.

RWY 09-27: 2600X100 (TURF)

RWY 09: Trees. Rgt tfc. RWY 27: Thld disp'd 1200'. Trees.

**AIRPORT REMARKS:** Attended irregularly. Deer in vicinity of airport. Rwy 09-27, 80' trees along both rwy edges. Rwy 09-27 fence at west end. Rwy 01-19 and disp'd thlds marked with 3' yellow cones. Rwy 09-27 and disp'd thld marked with yellow cones. Rwy 01-19 NSTD LIRL not for public use.

**COMMUNICATIONS:** CTAF: 122.9

CHICAGO

WAAS CH <b>50209</b> <b>W10A</b>	APP CRS <b>109°</b>	Rwy Idg TDZE Apt Elev <b>736</b>	<b>4300</b> <b>736</b>
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# RNAV (GPS) RWY 10

OWOSSO COMMUNITY (RNP)

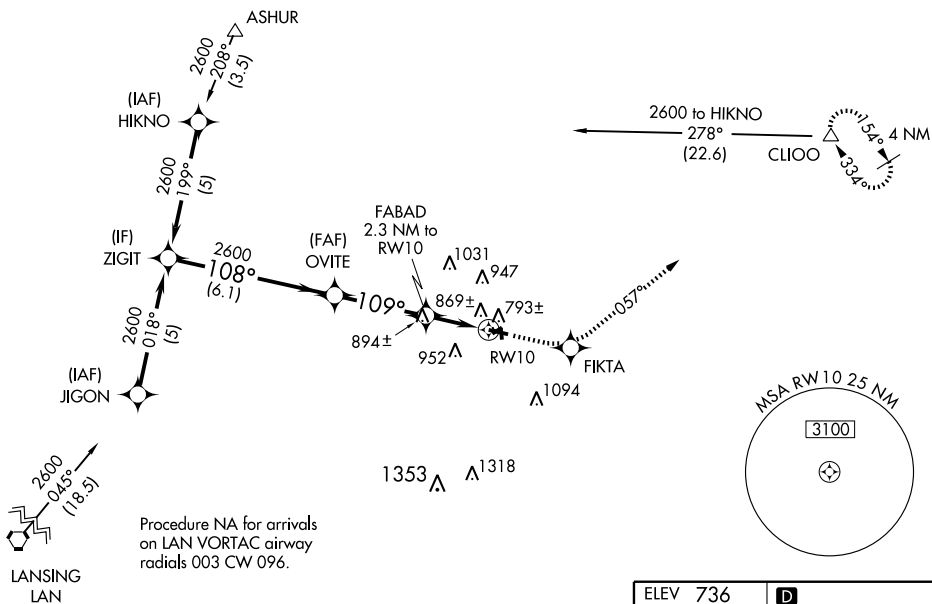
**▼** Circling to Rwy 6-24 and 18-36 NA. When local altimeter setting not received, use Flint altimeter setting and increase all DA 47 feet and LPV visibility  $\frac{1}{4}$  mile all Cats, increase all MDA 60 feet and LNAV Cat C visibility  $\frac{1}{4}$  mile.  
**▲** Baro-VNAV NA when using Flint altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.

**MISSED APPROACH:** Climb to 3000 direct FIKTA and via 057° track to CLIOO and hold.

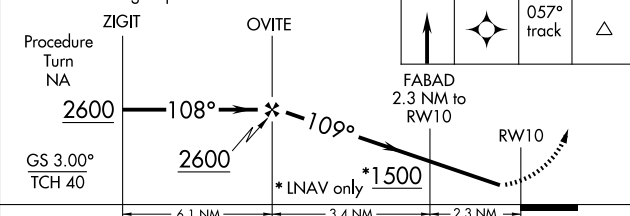
AWOS-3  
**118.025**

FLINT APP CON  
**118.8 257.9**

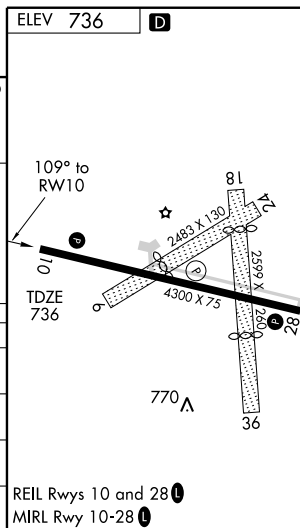
UNICOM  
**123.0 (CTAF) 0**



VGSI and RNAV glidepath not coincident.



CATEGORY	A	B	C	D
LPV DA	1079-1 $\frac{1}{4}$	343 (400-1 $\frac{1}{4}$ )		NA
LNAV/VNAV DA	1258-2	522 (600-2)		NA
LNAV MDA	1180-1	444 (500-1)	1180-1 $\frac{1}{4}$ 444 (500-1 $\frac{1}{4}$ )	NA
CIRCLING	1240-1	504 (600-1)	1260-1 $\frac{1}{2}$ 524 (600-1 $\frac{1}{2}$ )	NA





APP CRS	Rwy Idg	<b>4300</b>
<b>289°</b>	TDZE	<b>736</b>
	Apt Elev	<b>736</b>

# RNAV (GPS) RWY 28

OWOSSO COMMUNITY (R.NP)

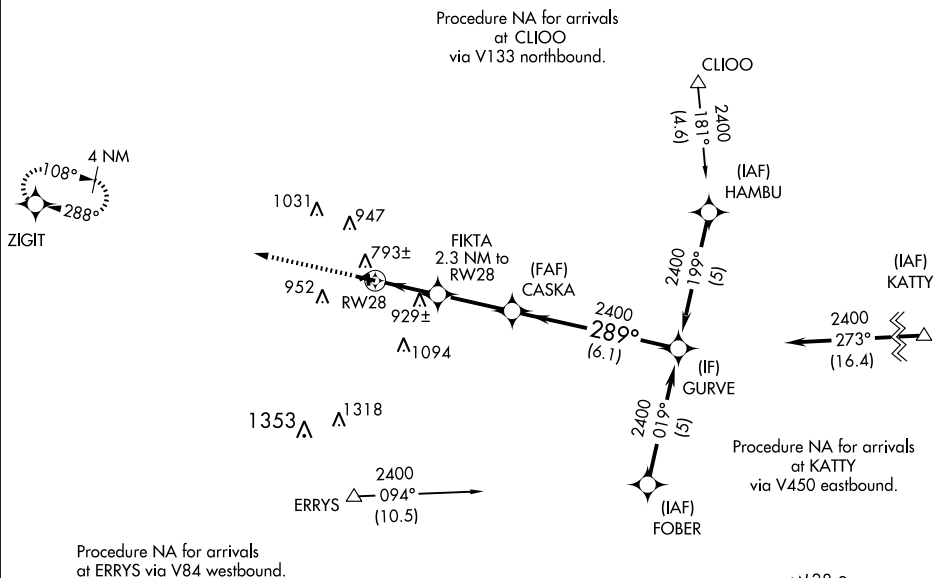
**▼** Circling to Rwy 6-24 and 18-36 NA. When local altimeter setting not received, use Flint altimeter setting and increase all MDA 60 feet and LNAV Cat C visibility ¼ mile. DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.

**MISSED APPROACH:** Climb to 2600 direct ZIGIT and hold.

AWOS-3  
**118.025**

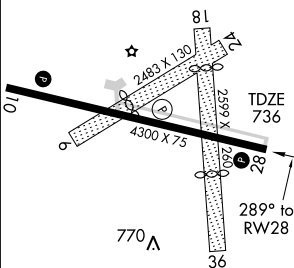
FLINT APP CON  
**118.8 257.9**

UNICOM  
**123.0 (CTAF) 0**



ELEV 736

**D**



REIL Rwy 10 and 28 **0**  
MIRL Rwy 10-28 **0**

VGSIs and descent angles not coincident.				
2600	ZIGIT	CASKA	GURVE	
		FIKTA 2.3 NM to RW28		
		289°	289°	2400
		1500		Procedure Turn NA
		2.3 NM	2.7 NM	6.1 NM
CATEGORY	A	B	C	D
LNAV MDA	1180-1	444 (500-1)	1180-1¼ 444 (500-1¼)	NA
CIRCLING	1240-1	504 (600-1)	1260-1½ 524 (600-1½)	NA

VORTAC FNT  
**116.9**  
Chan **116**

APP CRS  
**281°**

Rwy Idg **4300**  
TDZE **736**  
Apt Elev **736**

# VOR/DME RWY 28

OWOSSO COMMUNITY (RNP)

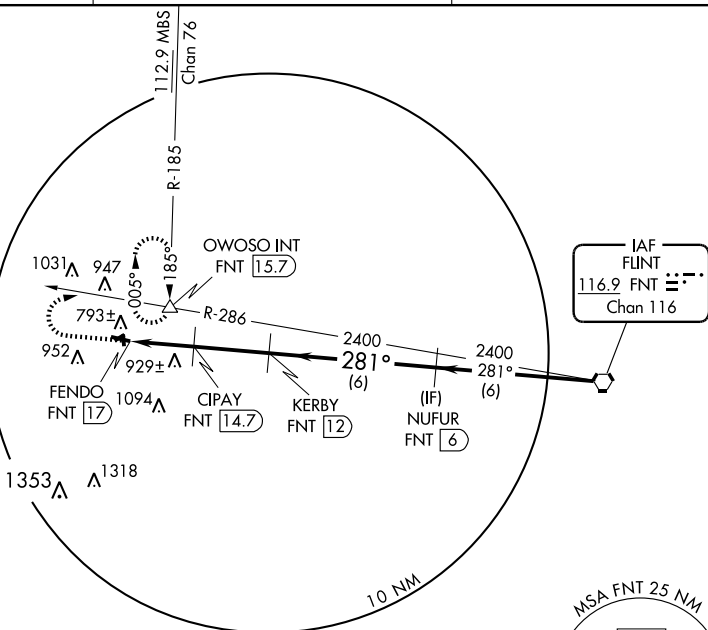
**▼** Circling to Rwy 6-24 and 18-36 NA. When local altimeter setting not received, use Flint altimeter setting and increase all MDA 60 feet and S-28 Cat C visibility ¼ mile. Visibility reduction by helicopters NA.

**MISSED APPROACH:** Climb to 1900 then climbing right turn to 2700 via FNT VORTAC R-286 to OWOSSO INT and hold.

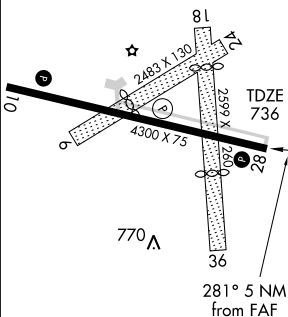
AWOS-3  
**118.025**

FLINT APP CON  
**118.8 257.9**

UNICOM  
**123.0 (CTAF) 0**



ELEV 736 **D**



REIL Rwy 10 and 28 **0**  
MIRL Rwy 10-28 **0**

VGSIs and descent angles not coincident.				
1900	2700	OWOSSO INT	KERBY FNT 12	NUFUR FNT 6
↑	FNT R-286 116.9	△		
	FENDO FNT 17	CIPAY FNT 14.7	281°	281°
	1500	2400	2400	2400
	2.3 NM	2.7 NM	6 NM	
CATEGORY	A	B	C	D
S-28	1180-1	444 (500-1)	1180-1½ 444 (500-1½)	NA
CIRCLING	1240-1	504 (600-1)	1260-1½ 524 (600-1½)	NA

Procedure  
Turn  
NA

**PARK TOWNSHIP** (See HOLLAND)**PAUL C. MILLER-SPARTA** (See SPARTA)**PAW PAW****ALMENA** (2C5) 3 NE UTC-5(-4DT) N42°15.15' W85°51.02'

CHICAGO

740 NOTAM FILE LAN

**RWY 09-27:** 3300X100 (TURF)**RWY 09:** Thld dsplcd 1085'. Trees.**RWY 27:** Thld dsplcd 1159'. Trees.**AIRPORT REMARKS:** Attended irregularly. Occasional deer on rwy. Rwy 09-27 and dsplcd thlds marked with 3' yellow cones; dsplcd thlds marked with three 3' yellow cones on each side of rwy.**COMMUNICATIONS:** CTAF 122.9**PBEAAYE** (See TOPINABEE)**PECK** N43°15.35' W82°43.08' NOTAM FILE LAN.

DETROIT

(H) VORTAC 114.0 ECK Chan 87 289° 16.7 NM to Marlette. 810/7W. HIWAS.

H-10G, 11A, L-28J

**RCO 122.1R 114.0T (LANSING RADIO)****PELLSTON RGNL ARPT OF EMMET CO** (PLN) 1 NW UTC-5(-4DT)

LAKE HURON

N45°34.26' W84°47.80'

H-2L, L-31B

721 B S4 FUEL 100LL, JET A Class I, ARFF Index A NOTAM FILE PLN

IAP

**RWY 14-32:** H6513X150 (ASPH-GRVD) D-65, 2S-82, 2D-82,

2D/2D2-120 HIRL

**RWY 14:** REIL. VASI(V4L)—GA 3.0° TCH 52'. Trees.**RWY 32:** MALSR. Tree.**RWY 05-23:** H5401X150 (ASPH-GRVD) D-65, 2S-82, 2D-82,

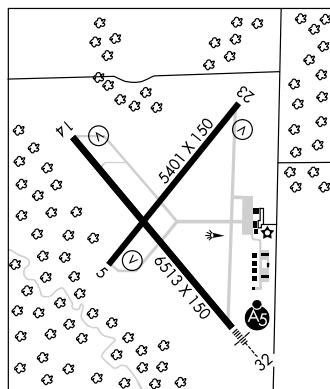
2D/2D2-120 MIRL

**RWY 05:** REIL. VASI(V4R)—GA 3.0° TCH 48'. Trees.**RWY 23:** REIL. VASI(V4L)—GA 3.0° TCH 45'. Road.**RUNWAY DECLARED DISTANCE INFORMATION****RWY 05:** TORA-5395 TODA-5395 ASDA-5395 LDA-5395**RWY 14:** TORA-6512 TODA-6512 ASDA-6512 LDA-6512**RWY 23:** TORA-5395 TODA-5395 ASDA-5395 LDA-5395**RWY 32:** TORA-6512 TODA-6512 ASDA-6512 LDA-6512**AIRPORT REMARKS:** Attended 1100-0400Z+. Arpt CLOSED to unscheduled air carriers with more than 30 passenger seats except by 24 hr PPR. Deer and gulls occasionally on and in/ovf arpt. Be alert for snow removal equipment and activity on and in/ovf rws during winter months. Twy B1 and E1 CLOSED 1 Nov thru 15 Apr. MIRL Rwy 05-23 and HIRL Rwy 14-32; REIL Rws 05 and 14 and 23 and MALSR Rwy 32 preset low ints 0530-1000Z+, after 1000Z+ to increase ints and ACTIVATE—CTAF. Rwy 05 and Rwy 23 REIL lctd 100' from their respective apch ends. Ldg fee (waived with fuel purchase).**WEATHER DATA SOURCES:** ASOS 119.025 (231) 539-7700. HIWAS 111.8 PLN.**COMMUNICATIONS:** CTAF/UNICOM 123.0**RCO 122.3 (LANSING RADIO) RCO 123.6 122.2 (LANSING RADIO)****MINNEAPOLIS CENTER APP/DEP CON 134.6****RADIO AIDS TO NAVIGATION:** NOTAM FILE PLN.

(L) VORTACW 111.8 PLN Chan 55 N45°37.84' W84°39.85' 243° 6.6 NM to fld. 840/6W. HIWAS.

VOR unusable 301°-339°.

ILS 111.3 I-PLN Rwy 32. Class IE.

**PETERSBURG****GRADOLPH FLD** (88G) 2 NW UTC-5(-4DT) N41°55.19' W83°44.10'

DETROIT

673 B NOTAM FILE LAN

COPTER

**RWY 09-27:** 2306X110 (TURF) LIRL (NSTD)**RWY 09:** Thld dsplcd 310'. Trees.**RWY 27:** Thld dsplcd 230'. P-line.**AIRPORT REMARKS:** Attended continuously. For LIRL Rwy 09-27 and rotating bcn call 734-279-1679. Rwy 09-27 and dsplcd thlds marked with yellow cones. Rwy 09-27 NSTD LIRL due to lens color and configuration. Rotating bcn OTS indef.**COMMUNICATIONS:** CTAF 122.9**PETLI** N42°58.09' W83°53.41' NOTAM FILE FNT.

DETROIT

**NDB (LOM) 269 FN 097° 6.5 NM to Bishop Intl. Unmonitored when twr clsd.**

LOC I-PLN **111.3** APP CRS **321°** Rwy Idg **6512**  
 TDZE **712** Apt Elev **721**

# ILS or LOC RWY 32

PELLSTON RGNL AIRPORT OF EMMET COUNTY (PLN)

When local altimeter setting not received, use Harbor Springs altimeter setting and increase DA 28 feet, and all MDA 40 feet, increase S-LOC 32 Cat D and EMHUR fix minimums S-LOC 32 Cat C visibilities ¼ mile.



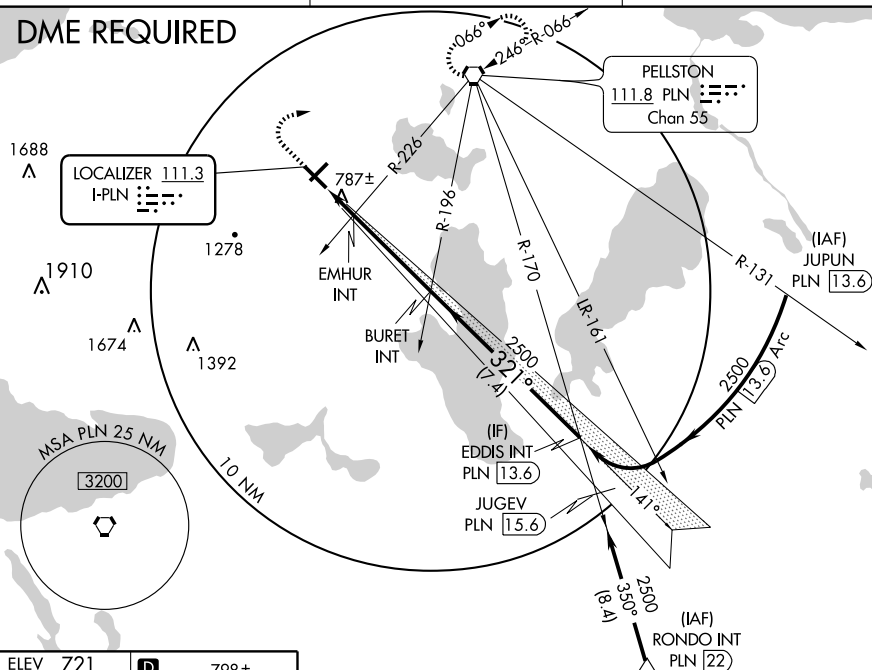
MISSED APPROACH: Climb to 1400 then climbing right turn to 2600 direct PLN VORTAC and hold.

ASOS  
**119.025**

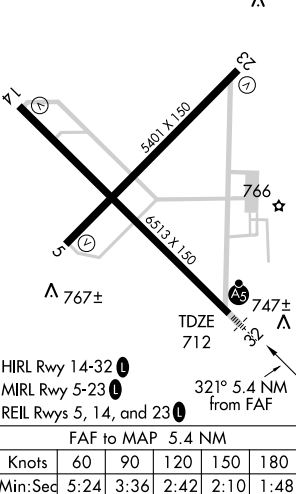
MINNEAPOLIS CENTER  
**134.6 354.05**

UNICOM  
**123.0 (CTAF) 0**

## DME REQUIRED

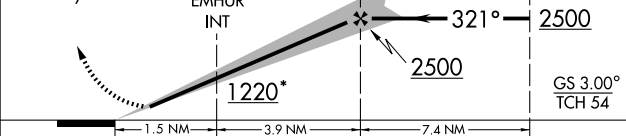


ELEV 721 **D** 798±



1400 2600 PLN  
111.8

\*LOC only.



CATEGORY	A	B	C	D
S-ILS 32	912-½		200 (200-½)	
S-LOC 32	1220-½ 508 (500-½)		1220-1 508 (500-1)	
CIRCLING	1260-1 539 (600-1)	1280-1 559 (600-1)	1280-1½ 559 (600-1½)	1420-2¼ 699 (700-2¼)
	EMHUR FIX MINIMUMS			
S-LOC 32	1080-½ 368 (400-½)			1080-¾ 368 (400-¾)
CIRCLING	1260-1 539 (600-1)	1280-1 559 (600-1)	1280-1½ 559 (600-1½)	1420-2¼ 699 (700-2¼)

PELLSTON, MICHIGAN

Amdt 11 09295

PELLSTON RGNL AIRPORT OF EMMET COUNTY (PLN)

45°34'N - 84°48'W

# ILS or LOC RWY 32

## RNAV (GPS) RWY 5

PELLSTON RGNL AIRPORT OF EMMET COUNTY (PLN)

APP CRS <b>051°</b>	Rwy Idg TDZE <b>5395</b> Apt Elev <b>721</b>
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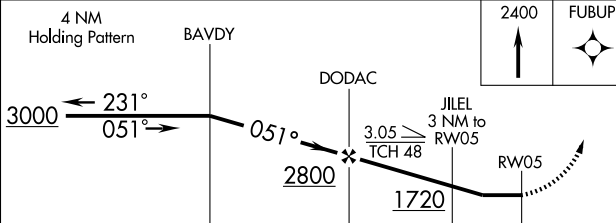
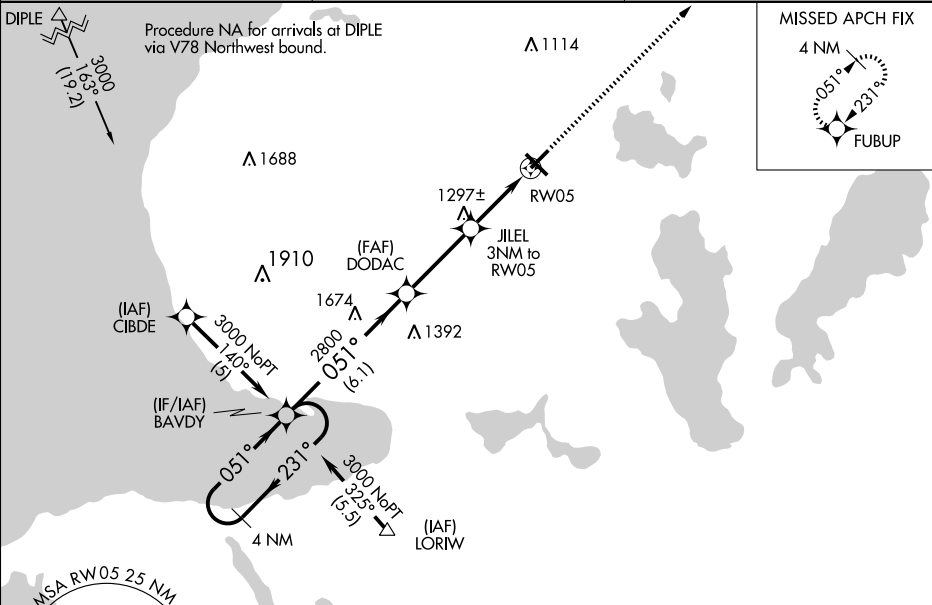
- ▽** DME/DME RNP-0.3 NA. Visibility reductions by helicopters NA.
- ▲** When local alimeter setting not received, use Harbor Springs alimeter setting and increase all MDA 40 feet, increase LNAV Cat. A/C/D visibilities ¼ mile.

MISSED APPROACH: Climb to 2400 direct FUBUP and hold.

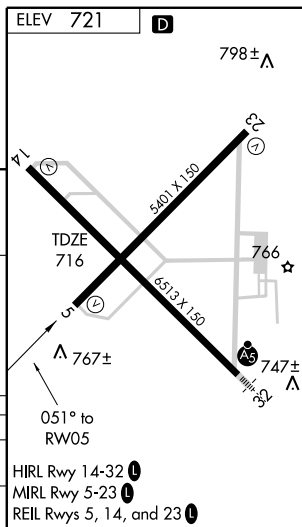
ASOS  
**119.025**

MINNEAPOLIS CENTER  
**134.6 354.05**

UNICOM  
**123.0 (CTAF) 0**



CATEGORY	A	B	C	D
LNAV MDA	1560-1 844 (900-1)	1560-1¼ 844 (900-1¼)	1560-2½ 844 (900-2½)	1560-2¾ 844 (900-2¾)
CIRCLING	1560-1 839 (900-1)	1560-1¼ 839 (900-1¼)	1560-2½ 839 (900-2½)	1560-2¾ 839 (900-2¾)



WAAS CH <b>81915</b> <b>W23A</b>	APP CRS <b>231°</b>	Rwy Idg <b>5395</b> TDZE <b>721</b> Apt Elev <b>721</b>
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## RNAV (GPS) RWY 23

PELLSTON RGNL AIRPORT OF EMMET COUNTY (PLN)

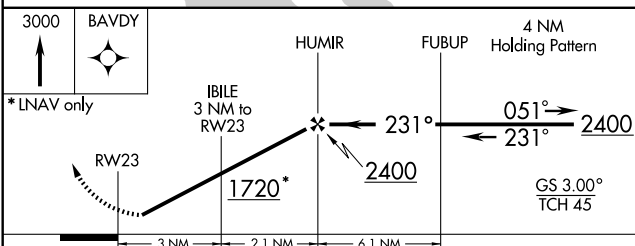
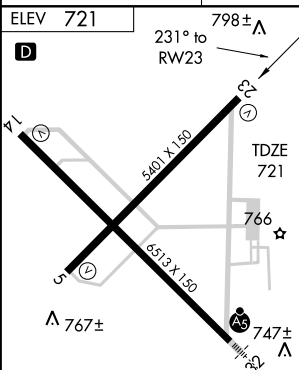
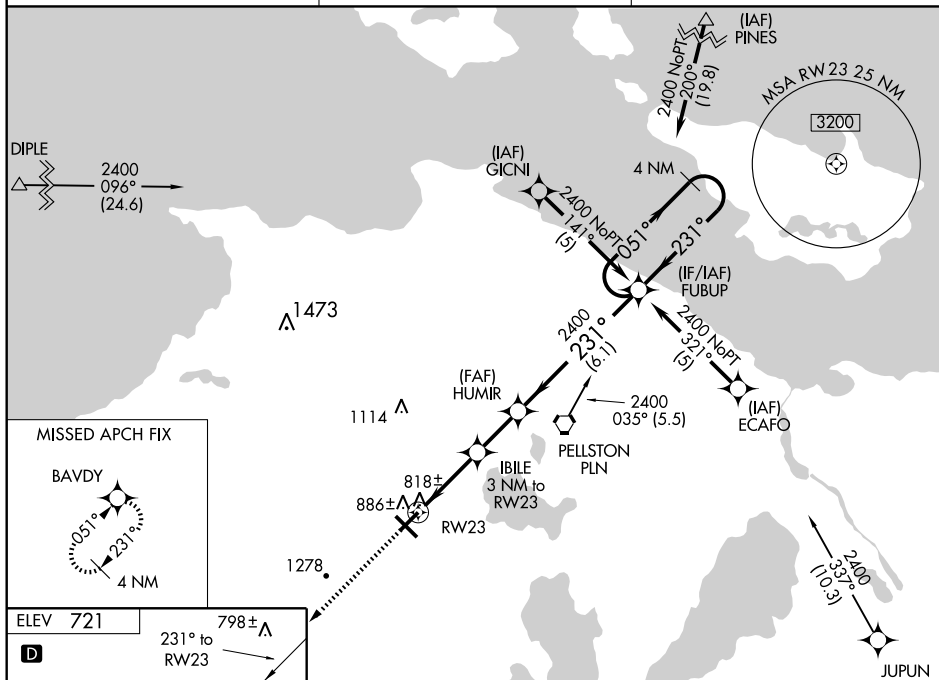
- ▼** Baro-VNAV NA when using Harbor Springs altimeter setting.  
**▲** For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Harbor Springs altimeter setting and increase all DA 28 feet, all MDA 40 feet, increase LNAV/VNAV all Cats visibility ¼ mile.

**MISSED APPROACH:** Climb to 3000 direct BAVDY and hold.

ASOS  
**119,025**

MINNEAPOLIS CENTER  
134.6 354.05

UNICOM  
123.0 (CTAF) **L**



CATEGORY	A	B	C	D
LPV DA	1057-1¼ 336 (400-1¼)			
LNNAV/ VNAV DA	1109-1¼ 338 (400-1¼)			
LNNAV MDA	1240-1 519 (600-1)		1240-1½ 519 (600-1½)	1240-1¾ 519 (600-1¾)
CIRCLING	1260-1 539 (600-1)	1280-1 559 (600-1)	1280-1½ 559 (600-1½)	1420-2¼ 699 (700-2¼)

PELLSTON, MICHIGAN  
Orig 09295

PELLSTON RGNL AIRPORT OF EMMET COUNTY (PLN)  
45°34'N - 84°48'W **RNAV (GPS) RWY 23**

RNAV (GPS) RWY 23

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1. 23 SEP 2010 to 21 OCT 2010

WAAS CH <b>77813</b> <b>W32A</b>	APP CRS <b>321°</b>	Rwy Idg <b>6512</b> TDZE <b>712</b> Apt Elev <b>721</b>
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## RNAV (GPS) RWY 32

# PELLSTON RGNL AIRPORT OF EMMET COUNTY (PLN)

**T** Inoperative table does not apply to LNAV Cat D. Baro-VNAV NA when using Harbor Springs altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Harbor Springs altimeter setting and increase all DA 28 feet and all MDA 40 feet. For inoperative MALSR when using Harbor Springs altimeter setting, increase LNAV Cat D visibility to 1 1/4 mile.

MALSR

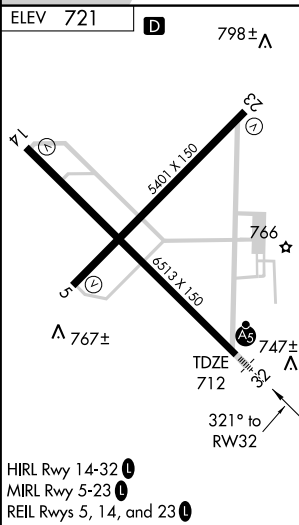
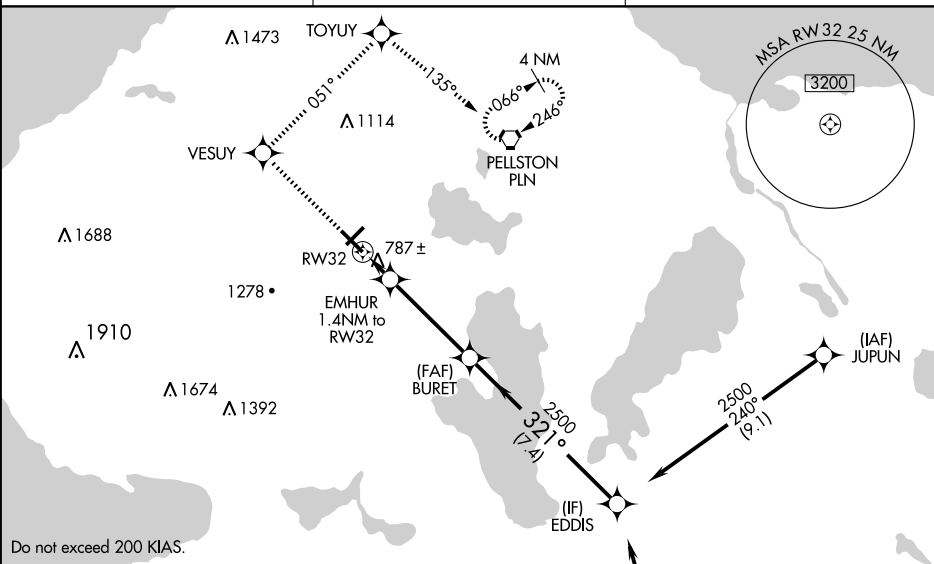


**MISSED APPROACH:** Climb to 2600 direct VESUY and via track 051° to TOYUY and via track 135° to PLN VORTAC and hold.

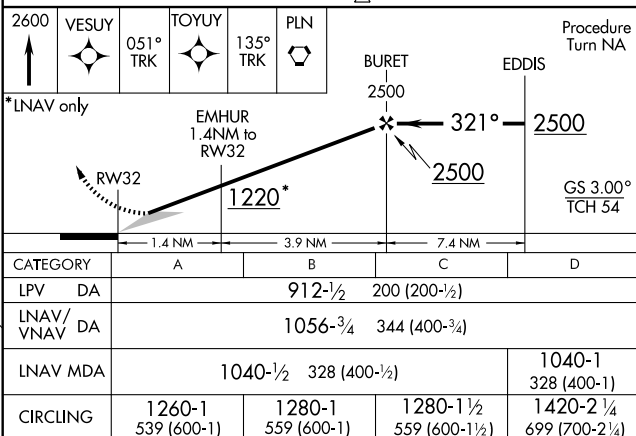
ASOS  
**119.025**

MINNEAPOLIS CENTER  
134.6 354.05

UNICOM  
123.0 (CTAF) **L**



Procedure NA for arrivals at RONDO  
via V609 Southbound.



PELLSTON, MICHIGAN  
Orig 09295

PELLSTON RGNL AIRPORT OF EMMET COUNTY (PLN)  
45°34'N - 84°48'W      **PNNAV (GPS) PWW 32**

RNAV (GPS) RWY 32

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1. 23 SEP 2010 to 21 OCT 2010

VORTAC PLN  
**111.8**  
 Chan **55**

APP CRS  
**063°**

Rwy Idg **5395**  
 TDZE **716**  
 Apt Elev **721**

**VOR/DME RWY 5**  
 PELLSTON RGNL AIRPORT OF EMMET COUNTY (PLN)

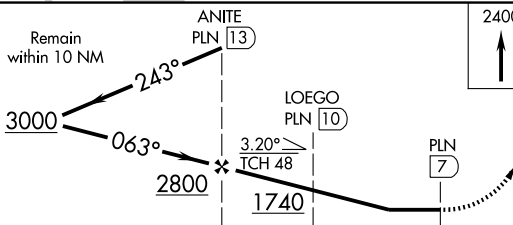
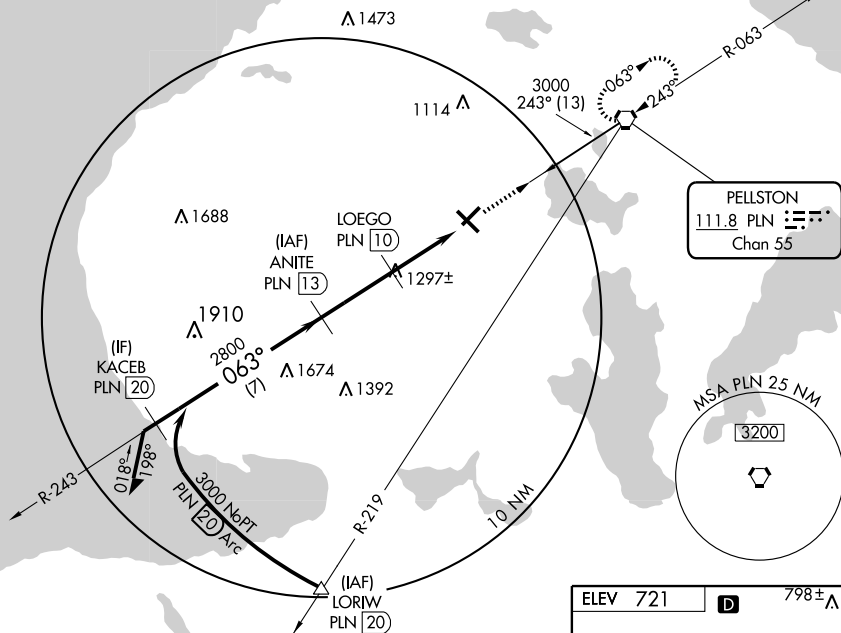
When local altimeter setting not received, use Harbor Springs altimeter setting and increase all MDA 40 feet, increase S-5 Cat A/C/D visibilities ¼ mile.

MISSED APPROACH: Climb to 2400 direct PLN VORTAC and hold.

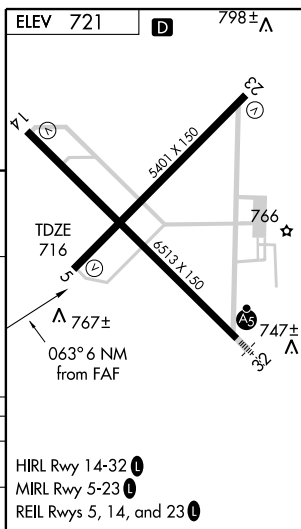
ASOS  
**119.025**

MINNEAPOLIS CENTER  
**134.6 354.05**

UNICOM  
**123.0 (CTAF) 0**



CATEGORY	A	B	C	D
S-5	1560-1 844 (900-1)	1560-1¼ 844 (900-1¼)	1560-2½ 844 (900-2½)	1560-2¾ 844 (900-2¾)
CIRCLING	1560-1 839 (900-1)	1560-1¼ 839 (900-1¼)	1560-2½ 839 (900-2½)	1560-2¾ 839 (900-2¾)





VORTAC PLN	APP CRS	Rwy Idg	5395
111.8	245°	TDZE	721
Chan 55		Apt Elev	721

# VOR RWY 23

## PELLSTON RGNL AIRPORT OF EMMET COUNTY (PLN)

▼ When local altimeter setting not received, use Harbor Springs altimeter setting and increase all MDA 40 feet. Increase all Cat C and S-23 Cat D visibility ¼ mile. Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 2000 then climbing left turn to 2800 direct PLN VORTAC and hold.

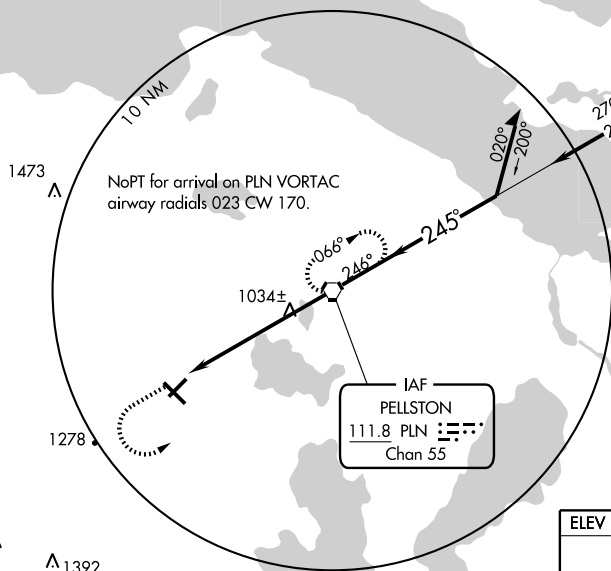
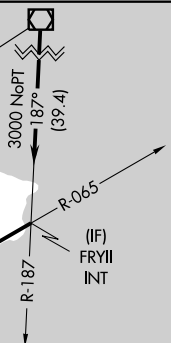
ASOS  
119.025

MINNEAPOLIS CENTER  
134.6 354.05

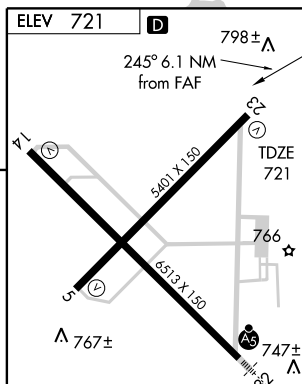
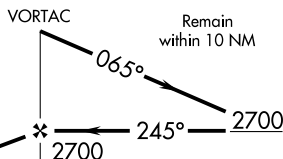
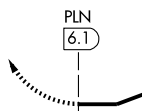
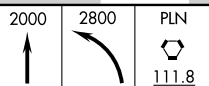
UNICOM  
123.0 (CTAF) 0

Procedure NA for arrivals at SSM VOR/DME via V45 Northbound.

IAF  
SAULT STE MARIE  
112.2 SSM  
Chan 59



1674  
1392



HIRL Rwy 14-32 0  
MIRL Rwy 5-23 0  
REIL Rws 5, 14, and 23 0

FAF to MAP 6.1 NM

Knots	60	90	120	150	180
Min:Sec	6:06	4:04	3:03	2:26	2:02

PELLSTON, MICHIGAN  
Amdt 16 09295

PELLSTON RGNL AIRPORT OF EMMET COUNTY (PLN)  
45°34'N - 84°48'W  
VOR RWY 23

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010

**PHURN** N42°50.58' W82°35.80'. NOTAM FILE PHN.  
**NDB (LOM)** 332 PH 043° 5.1 NM to St Clair Co Intl.

DETROIT

**PIKLE** N45°43.36' W87°13.49' NOTAM FILE ESC.  
**NDB (LOM)** 344 ES 087° 5.5 NM to Delta Co.

## PINCONNING

**GROSS** (52I) 3 W UTC-5(-4DT) N43°50.81' W84°00.68'

DETROIT

615 NOTAM FILE LAN

**RWY 09-27:** 2565X100 (TURF) LIRL

**RWY 09:** Trees. **RWY 27:** Thld dspcd 442'. Road.

**AIRPORT REMARKS:** Attended phone req—call 517-879-9915. Fuel avbl emerg only. For snow removal call 989-708-7583. Buildings in primary surface east end, 70' N; 93' S of centerline; also 4' fence along rwy edge, first 140', S side; +15'-45' trees 95' S of centerline west end. Rwy 09-27 marked with 3' yellow cones.

ACTIVATE LIRL Rwy 09-27—CTAF.

**COMMUNICATIONS:** CTAF 122.9

**PLAINWELL MUNI** (61D) 2 N UTC-5(-4DT) N42°28.07' W85°38.88'

CHICAGO

722 S4 **FUEL** 100LL NOTAM FILE LAN

**RWY 09-27:** H2650X50 (ASPH) LIRL

**RWY 09:** Thld dspcd 191'. Expressway. **RWY 27:** Thld dspcd 775'. Trees.

**RWY 01-19:** 2550X150 (TURF)

**RWY 01:** Thld dspcd 268'. Tree. **RWY 19:** Thld dspcd 980'. Trees.

**AIRPORT REMARKS:** Attended irregularly. Rwy 09-27 sfc extensive cracking. For LIRL Rwy 09-27 key 122.8 five times on. Rwy 01-19 and dspcd thlds marked with yellow cones.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

## PLYMOUTH

**CANTON-PLYMOUTH-METTETAL** (1D2) 2 S UTC-5(-4DT) N42°20.89' W83°27.38'

DETROIT

696 B S4 **FUEL** 100LL TPA-1696(1000) NOTAM FILE LAN

**RWY 18-36:** H2303X75 (ASPH-GRVD) S-12.5 MIRL 0.5% up N

**RWY 18:** PAPI(P2L)—GA 4.0° TCH 25'. Road.

**RWY 36:** PAPI(P4R)—GA 3.0° TCH 25'. Trees.

**AIRPORT REMARKS:** Attended 1300Z±dusk. Fuel 24 hour self serve.

Noise sensitive areas N and S of arpt. Ctc arpt manager

734-459-0012 for noise abatement procedures. ACTIVATE MIRL

Rwy 18-36, PAPI Rwy 18 and Rwy 36—CTAF.

**COMMUNICATIONS:** CTAF/UNICOM 122.7

® DETROIT APP/DEP CON 118.95

**RADIO AIDS TO NAVIGATION:** NOTAM FILE LAN.

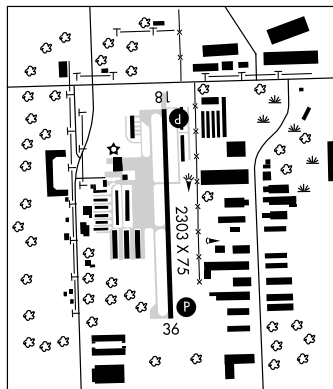
**SALEM (L) VORTAC** 114.3 SVM Chan 90 N42°24.53'

W83°35.65' 124° 7.1 NM to fld. 950/3W.

COPTER

L-281, A

IAP



**PONDEROSA HELIPORT** (See HIGHLAND)

**PONTIAC** N42°42.05' W83°31.97' NOTAM FILE PTK.

DETROIT

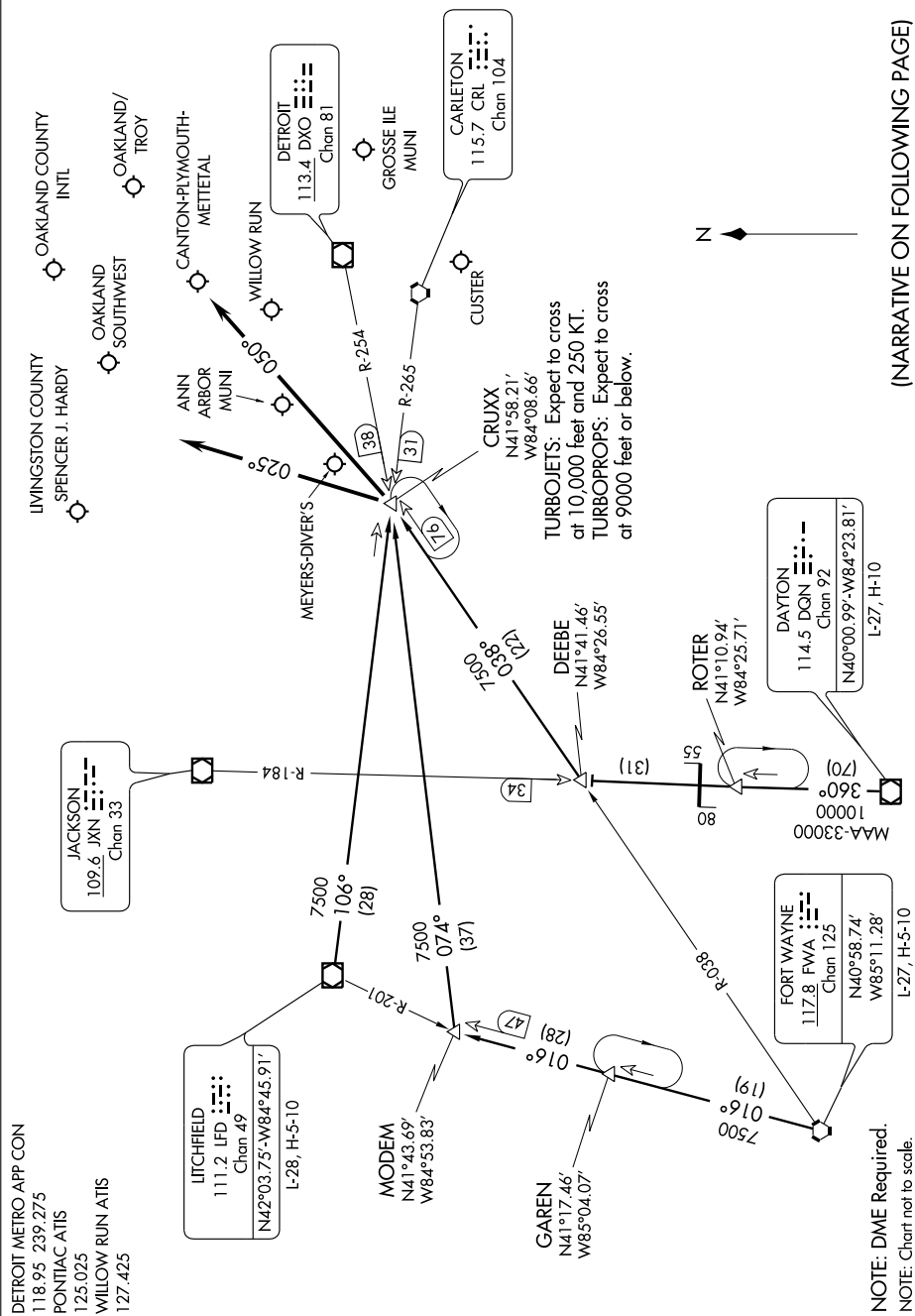
(L) **VORTAC** 111.0 PSI Chan 47 116° 5.4 NM to Oakland Co Intl. 1148/3W.

VOR unusable 170°-210°.

**RCO 122.15R 111.0T (LANSING RADIO)**

L-281, A

## CRUXX FOUR ARRIVAL



## CRUXX FOUR ARRIVAL (CRUXX.CRUX4)

DETROIT, MICHIGAN

## ARRIVAL DESCRIPTION

DAYTON TRANSITION (DQN.CRUX4): From over DQN VOR/DME via DQN R-360 and JXN R-184 to DEEBE INT and FWA R-038 to CRUXX INT. Thence . . . .

FORT WAYNE TRANSITION (FWA.CRUX4): From over FWA VORTAC via FWA R-016 to MODEM INT and DXO R-254 to CRUXX INT. Thence . . . .

LITCHFIELD TRANSITION (LFD.CRUX4): From over LFD VORTAC via LFD R-106 to CRUXX INT. Thence . . . .

. . . . Aircraft landing Y47, PTK, 0MI7, ØZW, ONZ, 1D2, TTF, VLL: From over CRUXX INT via 025° heading.

. . . . Aircraft landing YIP or ARB: From over CRUXX INT via 050° heading. Expect radar vector to final approach course.

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010

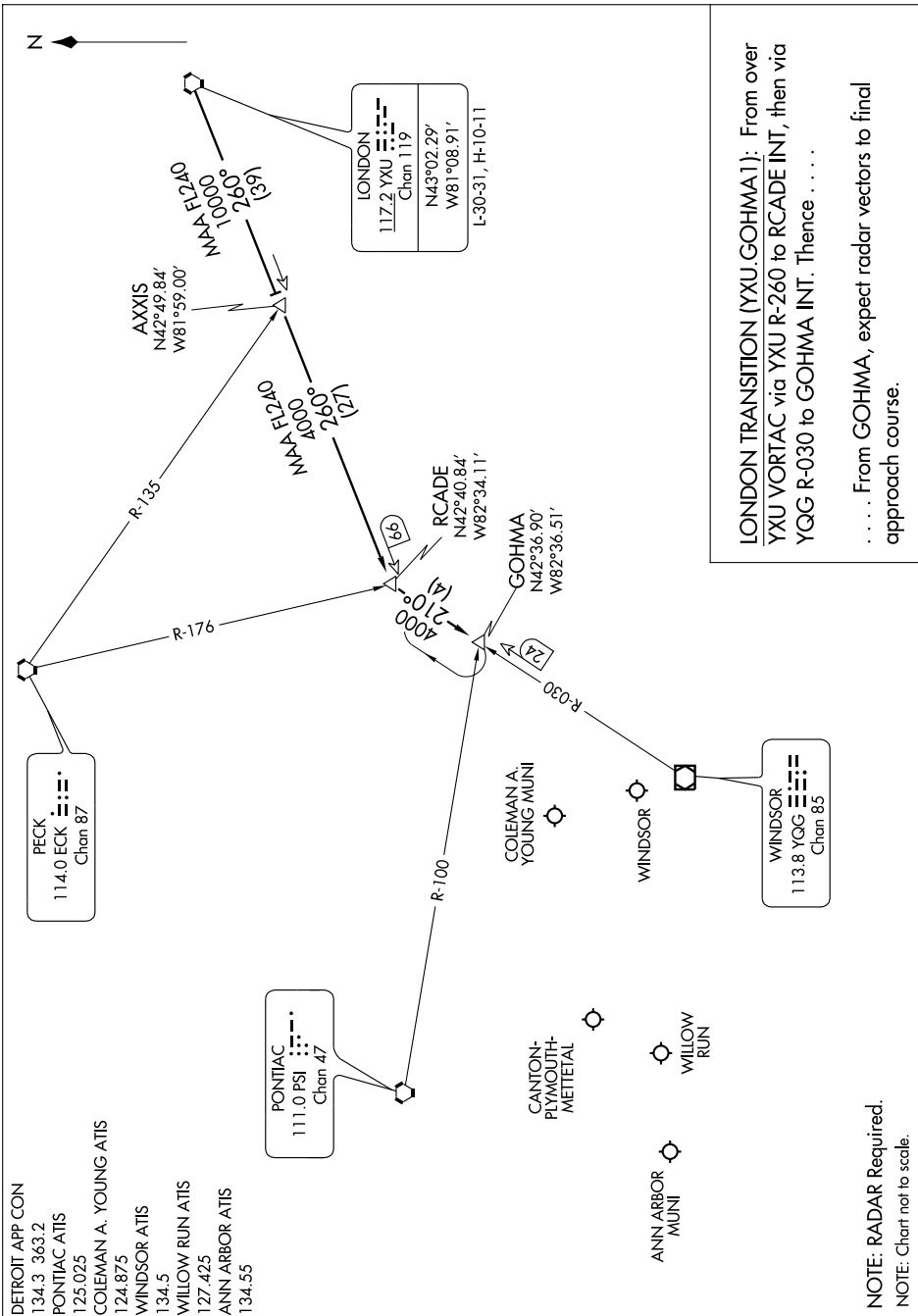
# GOHMA ONE ARRIVAL

DETROIT APP CON  
134.3 363.2  
PONTIAC ATIS  
125.025  
COLEMAN A. YOUNG ATIS  
124.875  
WINDSOR ATIS  
134.5  
WILLOW RUN ATIS  
127.425  
ANN ARBOR ATIS  
134.55

GOHMA ONE ARRIVAL  
(GOHMA.GOHMA1) 09351

ST-467 (FAA)

DETROIT, MICHIGAN

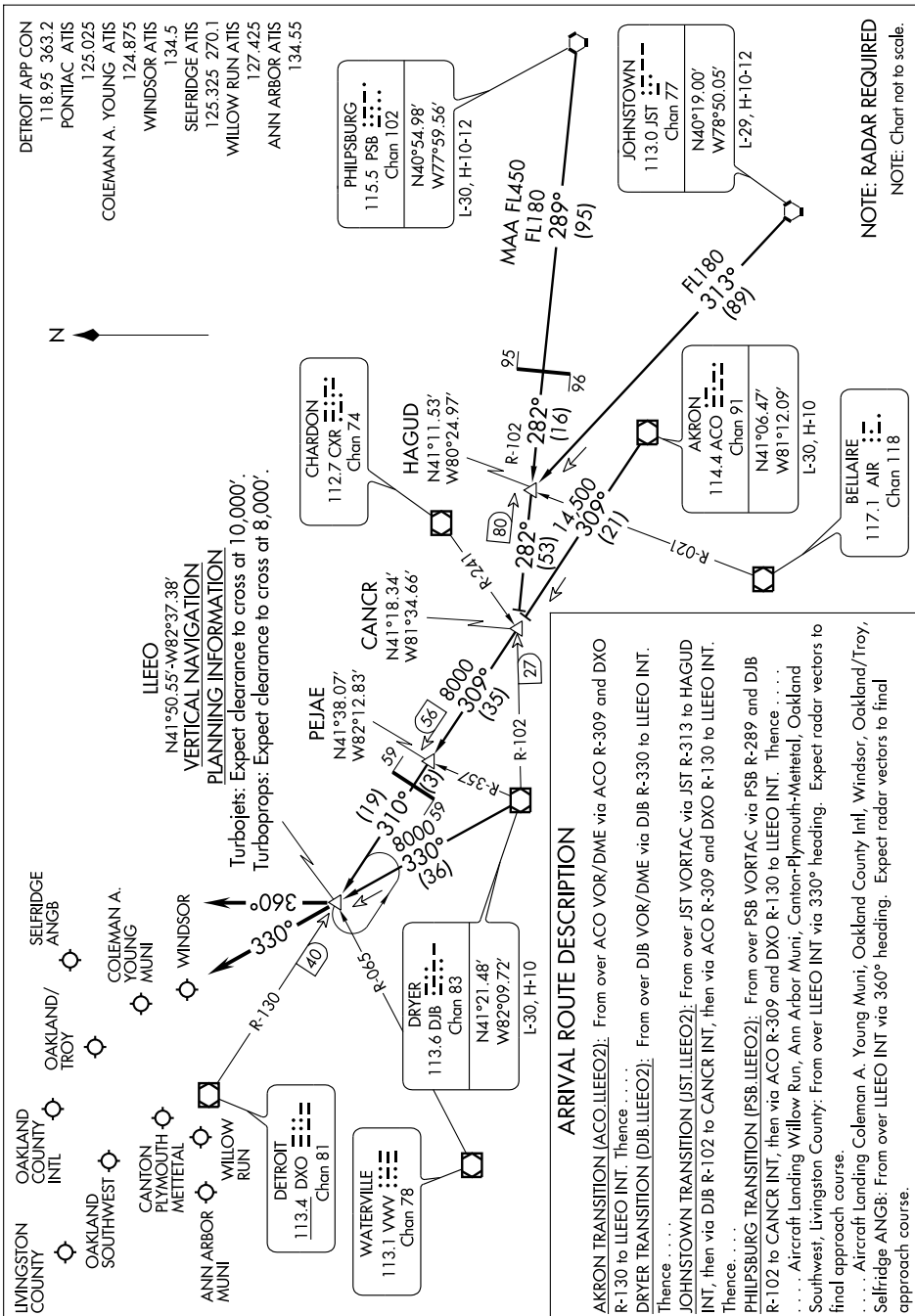


LONDON TRANSITION (YXU GOHMA1): From over YXU VORTAC via YXU R-260 to RCADE INT, then via YQG R-030 to GOHMA INT. Thence . . . . From GOHMA, expect radar vectors to final approach course.

EC-1, 23 SEP 2010 to 21 OCT 2010

DETROIT, MICHIGAN

## LEEO TWO ARRIVAL



## LEEO TWO ARRIVAL

(LLEO.LLEO2) 09127

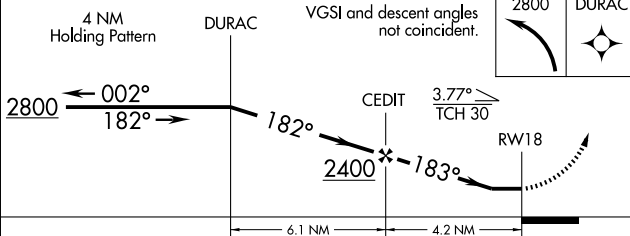
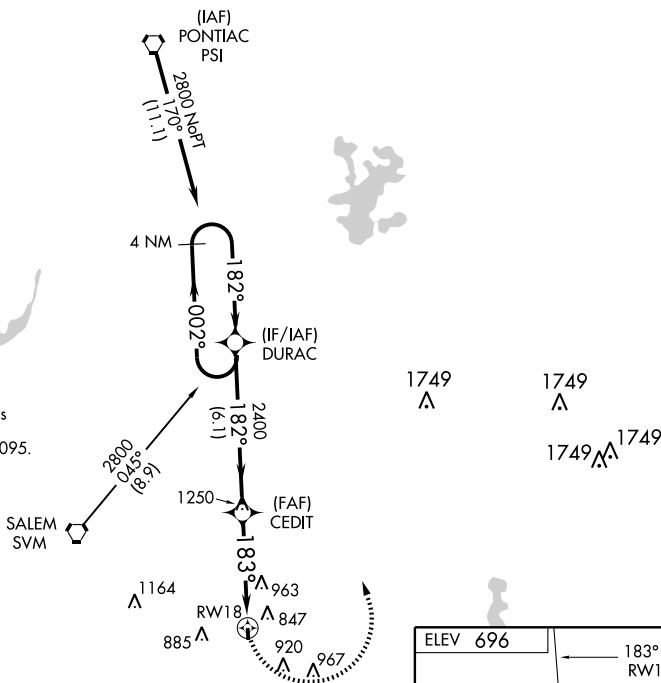
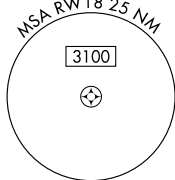
DETROIT, MICHIGAN

APP CRS  
**183°**Rwy Idg **2303**  
TDZE **696**  
Apt Elev **696****RNAV (GPS) RWY 18**

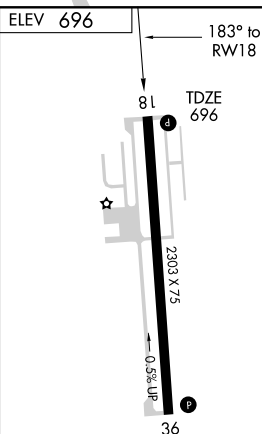
PLYMOUTH / CANTON-PLYMOUTH-METTETAL (1D2)



Use Willow Run altimeter setting; if not received, use Detroit Metropolitan Wayne County altimeter setting. Visibility reduction by helicopters NA. Circling NA at night. DME/DME RNP-0.3 NA.

MISSED APPROACH:  
Climbing left turn to 2800  
direct DURAC and hold.DETROIT APP CON  
**118.95 363.2**UNICOM  
**122.7 (CTAF) 0**Procedure NA for arrivals  
at SVM VORTAC via  
airway radials 349 CW 095.

CATEGORY	A	B	C	D
LNAV MDA	1300-1 604 (700-1)		NA	
CIRCLING	1300-1 604 (700-1)		NA	



MIRL Rwy 18-36 0

## SPRTN THREE ARRIVAL

DETROIT, MICHIGAN

DETROIT APP CON

127.5 239.275

WILLOW RUN ATIS 127.425

PONTIAC ATIS 125.025

COLEMAN A. YOUNG ATIS 124.875

WINDSOR ATIS 134.5

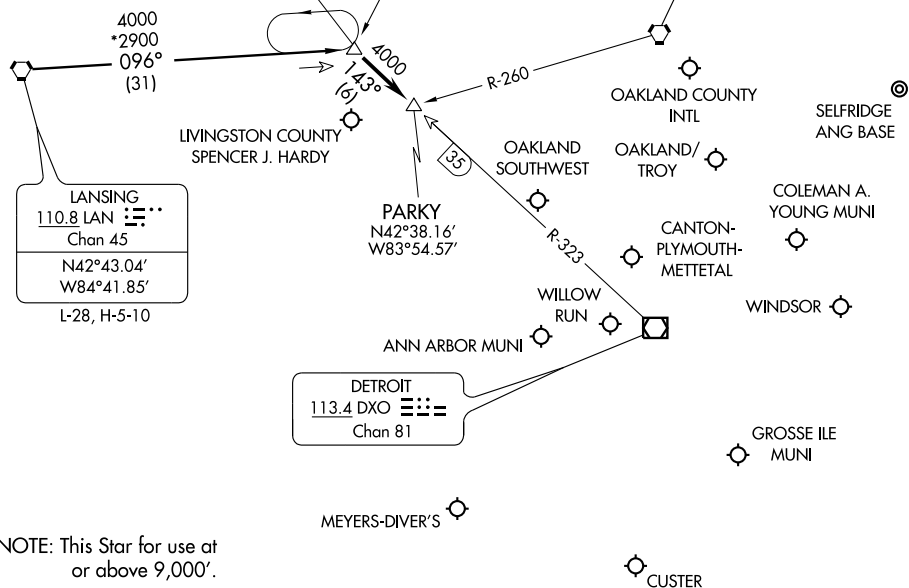
SELFRIAGE ATIS 125.325 270.1

SPRTN

N42°42.52'-W84°00.23'

VERTICAL NAVIGATION  
PLANNING INFORMATION

TURBOJETS/TURBOPROPS:

Expect clearance to cross at  
9000'.

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010

**LANSING TRANSITION (LAN.SPRTN3):** From over LAN VORTAC via LAN R-096 to SPRTN INT. Thence . . . .

. . . . Aircraft landing: DET, PTK, VLL, D98, MTC, ARB, YIP, ONZ, 1D2, TTF, Y47, 36MI, OZW, 3TE, YQG: From over SPRTN INT via DXO R-323 to PARKY INT. Thence . . . .

. . . . Expect radar vectors to final approach course.

## SPRTN THREE ARRIVAL

DETROIT, MICHIGAN

(SPRTN.SPRTN3) 10210



SVM VORTAC <b>114.3</b> Chan <b>90</b>	APP CRS <b>124°</b>	Rwy Idg TDZE Apt Elev	<b>N/A</b> <b>N/A</b> <b>696</b>
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**VOR-A**

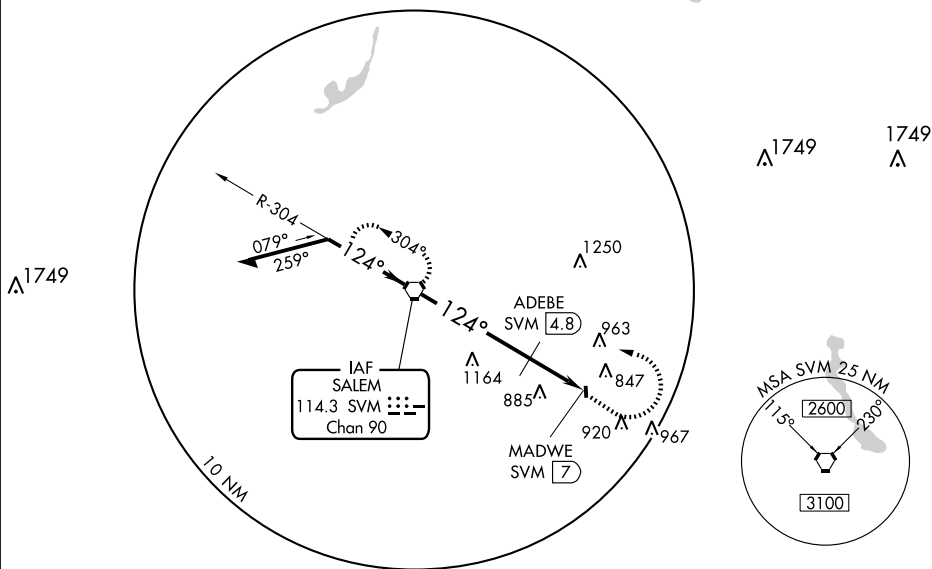
PLYMOUTH / CANTON-PLYMOUTH-METTETAL (1D2)

▼ Use Willow Run altimeter setting; if not received,  
 ▲ NA use Detroit Metropolitan Wayne County altimeter setting.  
 Visibility reduction by helicopters NA.

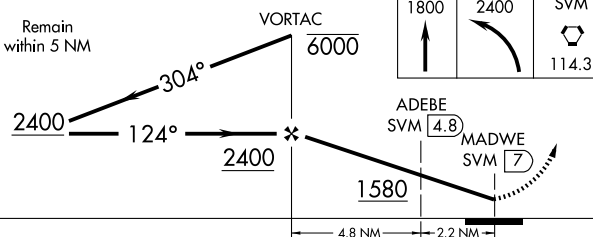
MISSED APPROACH: Climb to 1800 then climbing  
 left turn to 2400 direct SVM VORTAC and hold.

DETROIT APP CON  
**118.95 363.2**

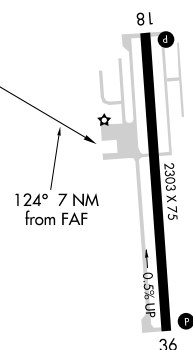
UNICOM  
**122.7 (CTAF) 0**



Remain  
 within 5 NM



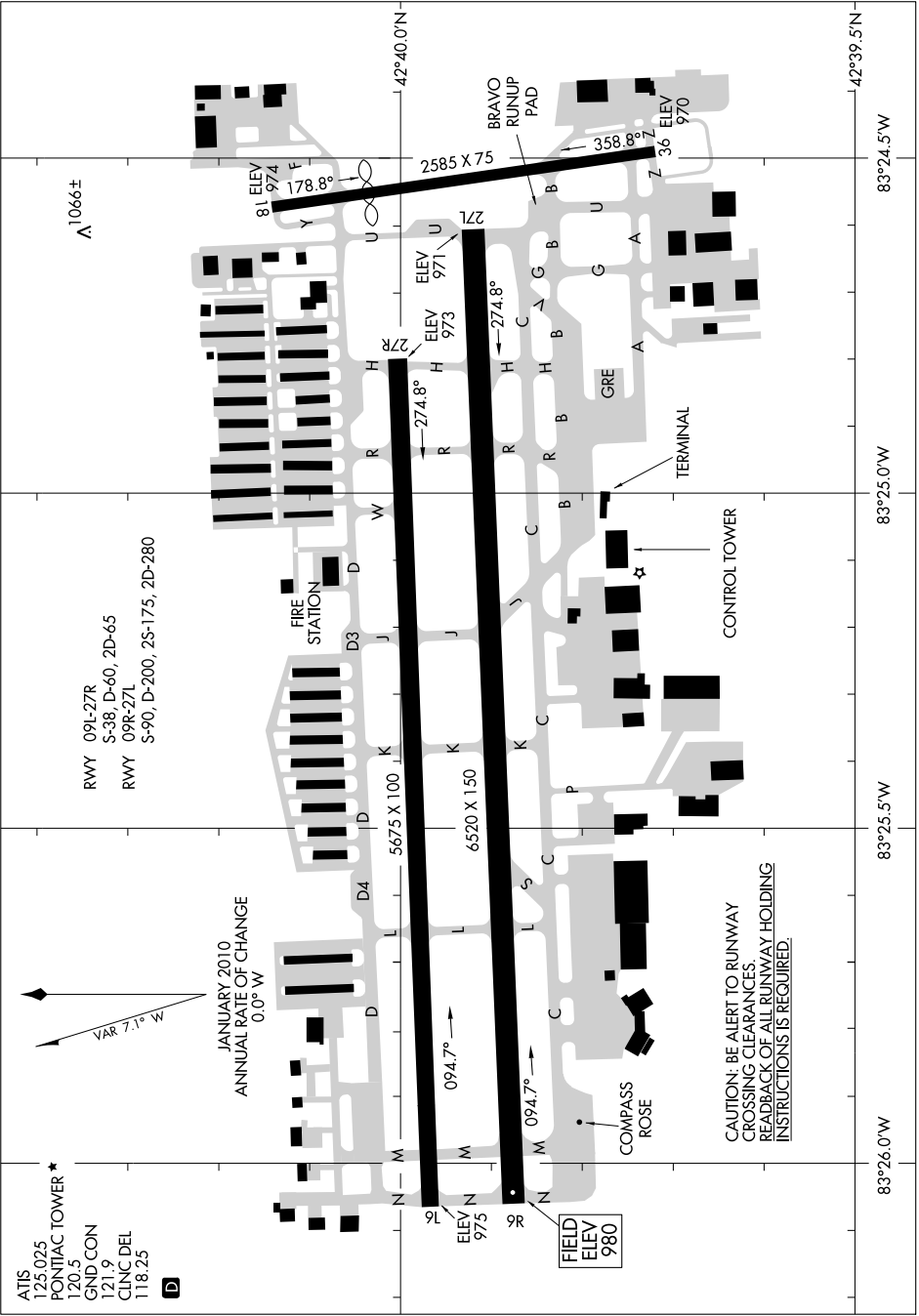
ELEV 696



MIRL Rwy 18-36 0

CATEGORY	A	B	C	D
CIRCLING	1580-1¼ 884 (900-1¼)	NA		
ADEBE FIX MINIMUMS				
CIRCLING	1220 - 1 524 (600-1)	NA		

FAF to MAP 7 NM					
Knots	60	90	120	150	180
Min:Sec	7:02	4:41	3:31	2:49	2:21



## PONTIAC

**OAKLAND CO INTL** (PTK) 5 W UTC-5(-4DT) N42°39.94' W83°25.23'

980 B S4 **FUEL** 100LL, JET A OX 1 LRA Class IV, ARFF Index A NOTAM FILE PTK

**RWY 09R-27L:** H6520X150 (ASPH-PFC) S-90, D-200, 2S-175, 2D-280 HIRL

**RWY 09R:** MALSR. PAPI (P4R)—GA 3.0° TCH 45'.

**RWY 27L:** REIL. VASI(V4L)—GA 3.0° TCH 45'. Trees.

**RWY 09L-27R:** H5675X100 (ASPH-PFC) S-38, D-60, 2D-65

MIRL

**RWY 09L:** REIL. PAPI(P4L).

**RWY 27R:** REIL. PAPI(P4L)—GA 3.0° TCH 51'.

**RWY 18-36:** H2585X75 (ASPH)

**RWY 18:** PAPI(P2L)—GA 3.0°. Thld dsplcd 650'.

**RWY 36:** PAPI(P2L)—GA 3.0°.

#### RUNWAY DECLARED DISTANCE INFORMATION

**RWY 09L:** TORA-5675 TODA-5675 ASDA-5675 LDA-5675

**RWY 09R:** TORA-6520 TODA-6520 ASDA-6520 LDA-6520

**RWY 27L:** TORA-6520 TODA-6520 ASDA-6520 LDA-6520

**RWY 27R:** TORA-5675 TODA-5675 ASDA-5675 LDA-5675

**AIRPORT REMARKS:** Attended continuously. Air carrier ops with more than 30 passenger seats req PPR call arpt manager  
248-666-3900. Seaplane Idgs and tkfs on Lake Angelus 4.5 miles ENE is prohibited by local ordinances. Birds and deer on and in vof arpt. Control twr unable to see more than 200' S of Rwy 35 thld and Twy G between Twy A and Twy B. Twy H and Twy U unlighted north of Rwy 09R-27L. Rwy 18 PAPI OTS indef. ACTIVATE MALSR Rwy 09R, PAPI Rwy 09R—CTAF. ACTIVATE PAPI Rwy 09L, REIL Rwy 27R, PAPI Rwy 27R, and VASI Rwy 27L ctc twr. Ldg fee for acft over 12500 lbs. US Customs user fee arpt. Contact U.S. Customs 1200-0100Z† Mon-Fri on 248-666-7717; other times minimum 3 hrs advance notification on 734-942-9000.

**WEATHER DATA SOURCES:** ASOS (248) 666-1818.

**COMMUNICATIONS:** CTAF 120.5 ATIS 125.025

UNICOM 122.95

**PONTIAC RCO** 122.15R 111.0T (LANSING RADIO)

® **DETROIT APP/DEP CON** 127.5

**PONTIAC TOWER** 120.5 123.7 (1100-0500Z†) **GND CON** 121.9 121.65 **CLNC DEL** 118.25

**AIRSPACE:** CLASS D svc 1100-0500Z† other times CLASS G.

**RADIO AIDS TO NAVIGATION:** NOTAM FILE PTK.

**PONTIAC (L) VORTAC** 111.0 PSI Chan 47 N42°42.05' W83°31.97' 116° 5.4 NM to fld. 1148/3W.

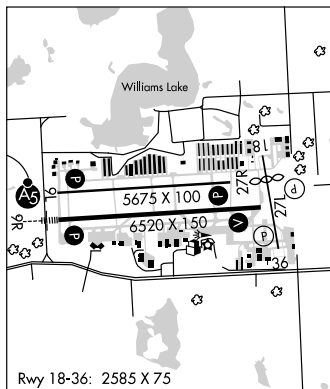
**ILS** 111.1 I-PTK Rwy 09R. Class IE. Unmonitored when twr clsd. LOC BC unusable byd 14 NM blo 3300'.

**DETROIT**

**COPTER**

H-10G, L-28J, A

IAP, AD



## AKRON TWO DEPARTURE

SL-5052 (FAA)

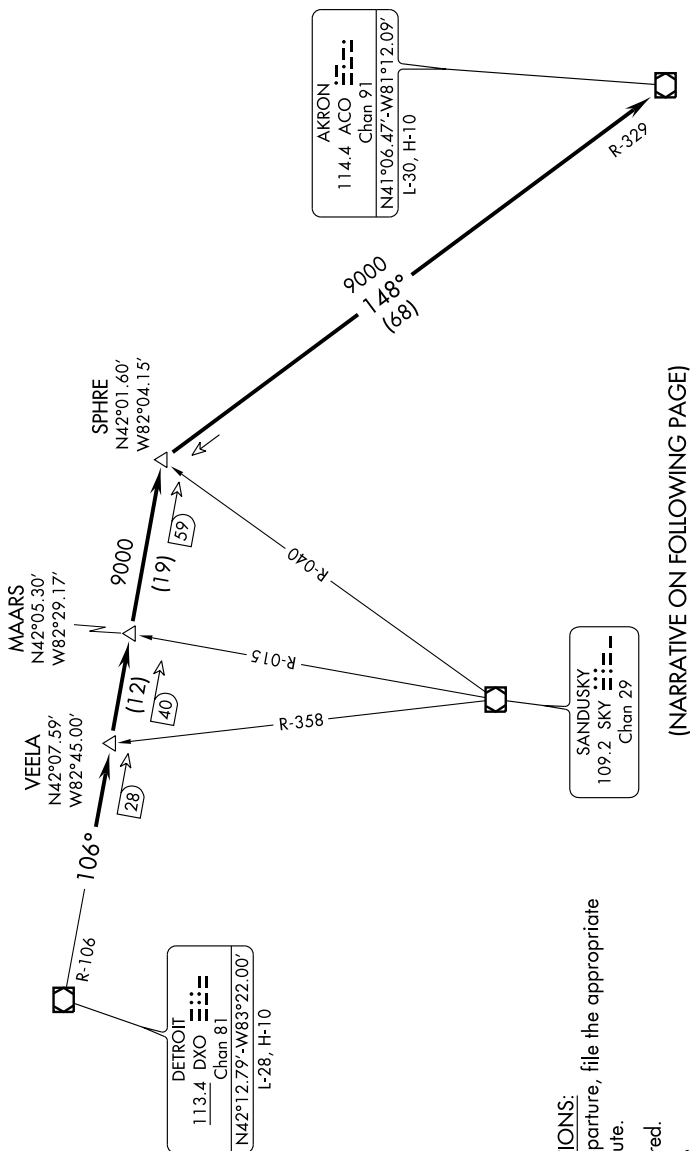
PONTIAC/ OAKLAND COUNTY INTL (PTK)

PONTIAC, MICHIGAN

ATIS 125.025  
CINC DEL  
118.25  
GND CON  
121.9  
PONTIAC TOWER ★  
120.5  
DETROIT DEP CON  
127.5 239.275  
CTAF  
120.5

## TAKE-OFF MINIMUMS

Rwys 17, 35: NA - Environmental.  
Rwys 9L, 9R, 27L, 27R: STANDARD.



## SPECIAL INSTRUCTIONS:

When using this departure, file the appropriate depicted fix and route.

NOTE: Radar Required.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

## AKRON TWO DEPARTURE

(ACO2.ACO) 09127

PONTIAC, MICHIGAN

PONTIAC/ OAKLAND COUNTY INTL (PTK)



## DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 9L/R and 27L/R: Climb via assigned heading for radar vectors, thence. . . .

. . . .to intercept DXO VOR/DME R-106 to SPHRE INT, then via ACO R-329 to ACO VOR/DME. Maintain 3000 feet, expect clearance to filed altitude/flight level ten (10) minutes after departure.

TAKE-OFF OBSTACLES

Rwy 9R: Multiple Trees beginning 1382' from DER, 647' left of centerline, up to 41' AGL/1011' MSL.

Ant on Hangar 870' from DER, 732' right of centerline, 36' AGL/1006' MSL.

Rwy 27L: Multiple Trees beginning 1075' from DER, 630' left of centerline, up to 78' AGL/1048' MSL.

Tree 1702' from DER, 945' right of centerline, 71' AGL/1041' MSL.

Rwy 27R: Tree 2057' from DER, 395' right of centerline, 71' AGL/1041 MSL'.



NOTE: DME Required.

DETROIT, MICHIGAN

## CRUXX FOUR ARRIVAL (CRUXX.CRUX4)

DETROIT, MICHIGAN

## ARRIVAL DESCRIPTION

DAYTON TRANSITION (DQN.CRUX4): From over DQN VOR/DME via DQN R-360 and JXN R-184 to DEEBE INT and FWA R-038 to CRUXX INT. Thence . . . .

FORT WAYNE TRANSITION (FWA.CRUX4): From over FWA VORTAC via FWA R-016 to MODEM INT and DXO R-254 to CRUXX INT. Thence . . . .

LITCHFIELD TRANSITION (LFD.CRUX4): From over LFD VORTAC via LFD R-106 to CRUXX INT. Thence . . . .

. . . . Aircraft landing Y47, PTK, 0MI7, ØZW, ONZ, 1D2, TTF, VLL: From over CRUXX INT via 025° heading.

. . . . Aircraft landing YIP or ARB: From over CRUXX INT via 050° heading. Expect radar vector to final approach course.

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010

## ERRTH TWO DEPARTURE

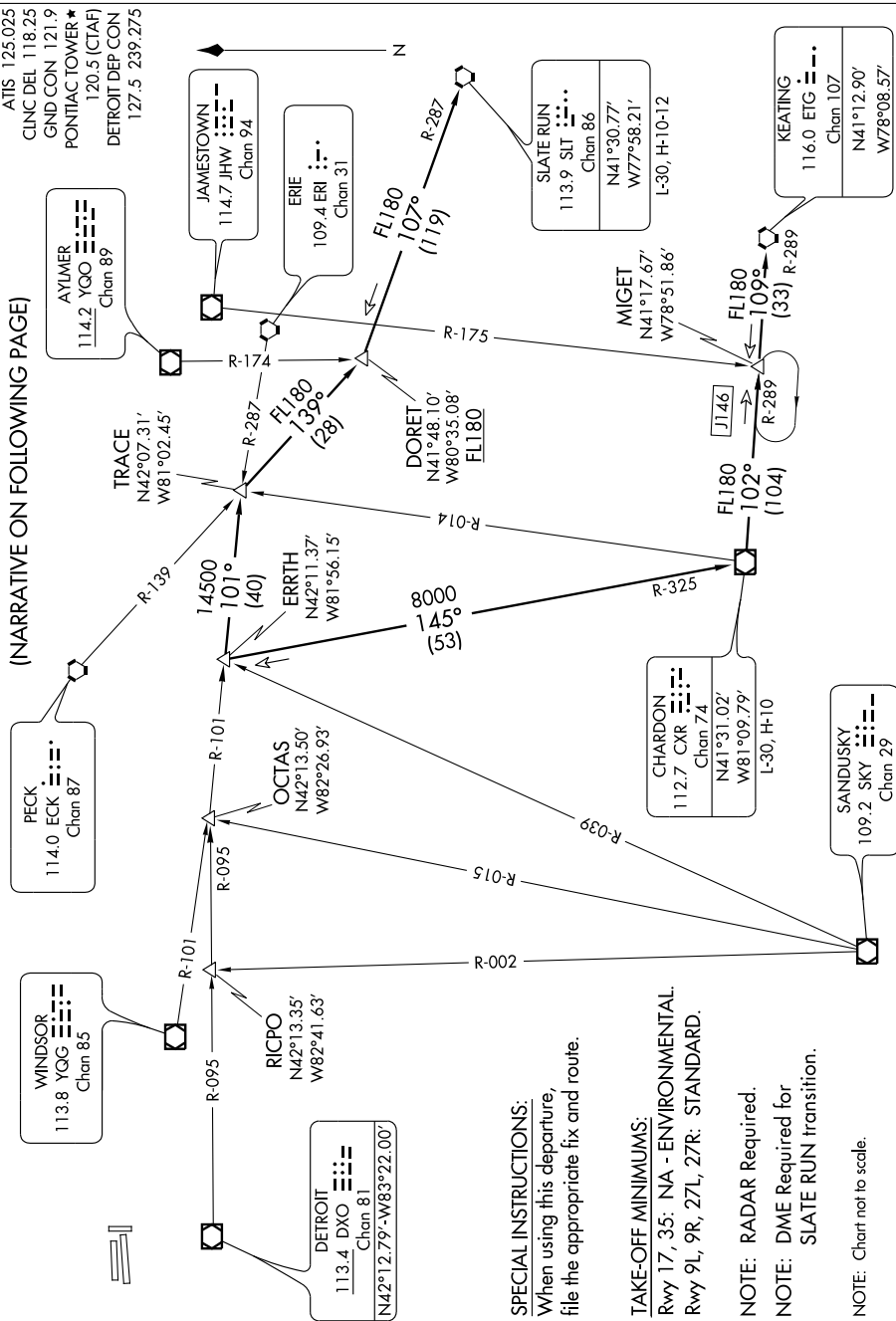
SL-5052 (FAA)

PONTIAC/ OAKLAND COUNTY INTL (PTK)

PONTIAC, MICHIGAN

EC-1, 23 SEP 2010 to 21 OCT 2010

(NARRATIVE ON FOLLOWING PAGE)



**SPECIAL INSTRUCTIONS:**

When using this departure, file the appropriate fix and route.

### TAKE-OFF MINIMUMS:

Rwy 17, 35: NA - ENVIRONMENTAL.  
Rwy 9L, 9R, 27L, 27R: STANDARD.

NOTE: RADAR Required.

NOTE: DME Required for  
SLATE RUN transition.

NOTE: Chart not to scale.

EC-1. 23 SEP 2010 to 21 OCT 2010

## ERRTH TWO DEPARTURE

(ERRTH2.ERRTH) 09127

PONTIAC, MICHIGAN  
PONTIAC/ OAKLAND COUNTY INTL (PTK)





## DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 9L/R and 27L/R: Climb via assigned heading for radar vectors to join the assigned SID. Maintain 3000 feet, expect clearance to filed altitude / flight level ten (10) minutes after departure.

CHARDON TRANSITION (ERRTH2.CXR): From over ERRTH INT via CXR R-325 to CXR VOR/DME.

KEATING TRANSITION (ERRTH2.ETG): From over ERRTH INT via CXR R-325 to CXR VOR/DME, then via CXR R-102 and ETG R-289 to MIGET INT, then via ETG R-289 to ETG VORTAC.

SLATE RUN TRANSITION (ERRTH2.SLT): (DME Required) From over ERRTH INT via YQG R-101 to TRACE INT, then via ECK R-139 to DORET INT, then via SLT R-287 to SLT VORTAC.

TAKE-OFF OBSTACLES:

Rwy 9R: Multiple trees beginning 1382' from DER, 647' left of centerline, up to 41' AGL/1011' MSL. Ant on hangar 870' from DER, 732' right of centerline, 36' AGL/1006' MSL.

Rwy 27L: Multiple trees beginning 1075' from DER, 630' left of centerline, up to 78' AGL/1048' MSL. Tree 1702' from DER, 945' right of centerline, 71' AGL/1041' MSL.

Rwy 27R: Tree 2057' from DER, 395' right of centerline, 71' AGL/1041' MSL.

## FORT WAYNE THREE DEPARTURE

PONTIAC/ OAKLAND COUNTY INTL (PTK)  
SL-5052 (FAA) PONTIAC, MICHIGAN

ATIS 125.025

CLNC DEL

118.25

GND CON

121.9

PONTIAC TOWER ★

120.5 (CTAF)


DETROIT DEP CON

127.5 239.275


SPECIAL INSTRUCTIONS:

Jets only.

When using this departure, file the appropriate depicted fix and route.


DETROIT  
113.4 DXO   
Chan 81  
N42°12.79'-W83°22.00'  
L-28, H-10




FORT WAYNE  
117.8 FWA   
Chan 125  
N40°58.74'-W85°11.28'  
L-27, H-5-10

ILLIE  
N41°14.91'  
W84°07.96'

ANNTS  
N41°41.01'  
W83°47.44'

WATERVILLE  
113.1 VWV   
Chan 78

FINDLAY  
108.2 FDY   
Chan 19

TAKE-OFF MINIMUMS

Rwys 9L, 9R, 27L, 27R: STANDARD.

Rwys 17, 35: NA - Environmental.

NOTE: RADAR Required.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

## FORT WAYNE THREE DEPARTURE

(FWA3.FWA) 09127

PONTIAC, MICHIGAN  
PONTIAC/ OAKLAND COUNTY INTL (PTK)



## DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 9L/R AND 27L/R: Climb via assigned heading for radar vectors, thence. . . .

. . . .to intercept DXO VOR/DME R-217 to ILLIE INT, then via FWA R-071 to FWA VORTAC. Maintain 3000, expect clearance to filed flight level ten (10) minutes after departure.

TAKE-OFF OBSTACLES:

- Rwy 9R: Multiple trees beginning 1382' from DER, 647' left of centerline, up to 41' AGL/1011' MSL.  
Ant on hangar 870' from DER, 732' right of centerline, 36' AGL/1006' MSL.
- Rwy 27L: Multiple trees beginning 1075' from DER, 630' left of centerline, up to 78' AGL/1048' MSL.  
Tree 1702' from DER, 945' right of centerline, 71' AGL/1041' MSL.
- Rwy 27R: Tree 2057' from DER, 395' right of centerline, 71' AGL/1041' MSL.

LOC I-PTK <b>111.1</b>	APP CRS <b>092°</b>	Rwy Idg TDZE Apt Elev	<b>6520</b> <b>980</b> <b>980</b>
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# ILS or LOC RWY 9R

## PONTIAC/OAKLAND COUNTY INTL (PTK)

- ▼ \*RVR 1800 authorized with the use of FD or AP or HUD to DA.  
When local altimeter setting not received, use Coleman A. Young Muni  
altimeter setting and increase DA 105 feet and all MDA 120 feet,  
increase S-LOC 9R Cats C and D visibility ½ mile, circling Cat B visibility  
¼ mile, Cats C and D visibility ½ mile.

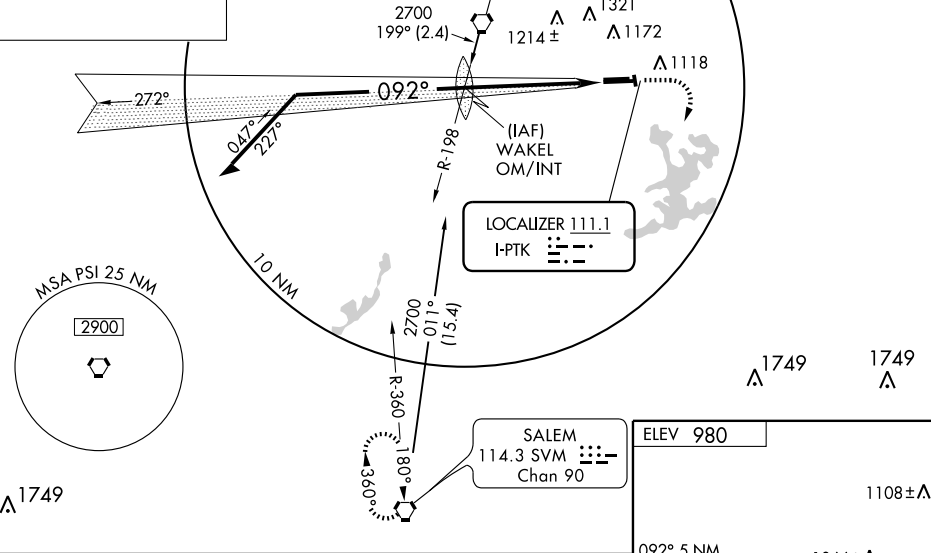
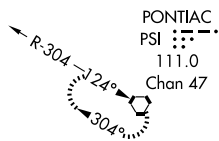
MALSR



MISSED APPROACH: Climb to 1600,  
then climbing right turn to 3000 direct  
SVM VORTAC and hold.

ATIS <b>125.025</b>	DETROIT APP CON <b>127.5 363.2</b>	PONTIAC TOWER ★ <b>120.5 (CTAF)</b>	GND CON <b>121.9</b>	CLNC DEL <b>118.25</b>	UNICOM <b>122.95</b>
------------------------	---------------------------------------	--	-------------------------	---------------------------	-------------------------

ALTERNATE  
MISSED APCH FIX



VGSI and ILS glidepath not coincident.

Remain  
within 10 NM

WAKEL  
OM/INT

1600

3000

SVM

114.3

2700

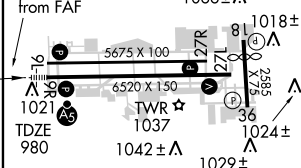
2669

2700

GS 3.00°  
TCH 55

5 NM

092° 5 NM  
from FAF



HIRL Rwy 9R-27L

MIRL Rwy 9L-27R

REIL Rwy 9L and 27L

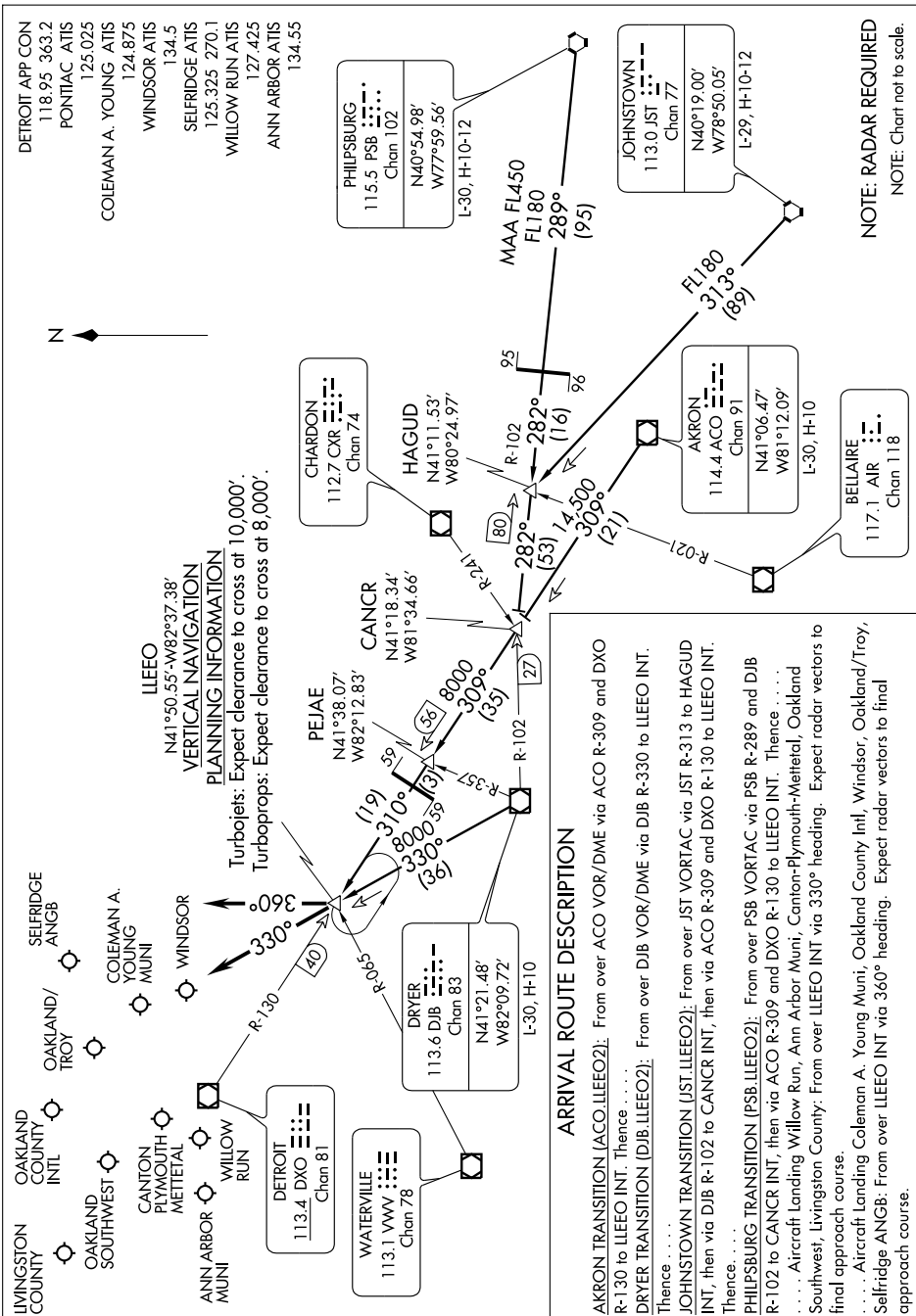
REIL Rwy 27R

FAF to MAP 5 NM

Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40

## LLEEO TWO ARRIVAL

EC-1, 23 SEP 2010 to 21 OCT 2010



## LLEEO TWO ARRIVAL

LOC I-PTK	APP CRS	Rwy Idg	<b>6520</b>
<b><u>111.1</u></b>	<b>272°</b>	TDZE	<b>974</b>
		Apt Elev	<b>980</b>

LOC BC RWY 27L  
PONTIAC/OAKLAND COUNTY INTL (PTK)

**T** When local altimeter setting not received, use Coleman A. Young Muni altimeter setting and increase all MDA 120 feet, increase S-27L Cat C/D visibility  $\frac{1}{4}$  mile and Circling Cat C/D visibility  $\frac{1}{2}$  mile.

**MISSED APPROACH:** Climbing left turn to 3000 direct SVM VORTAC and hold.

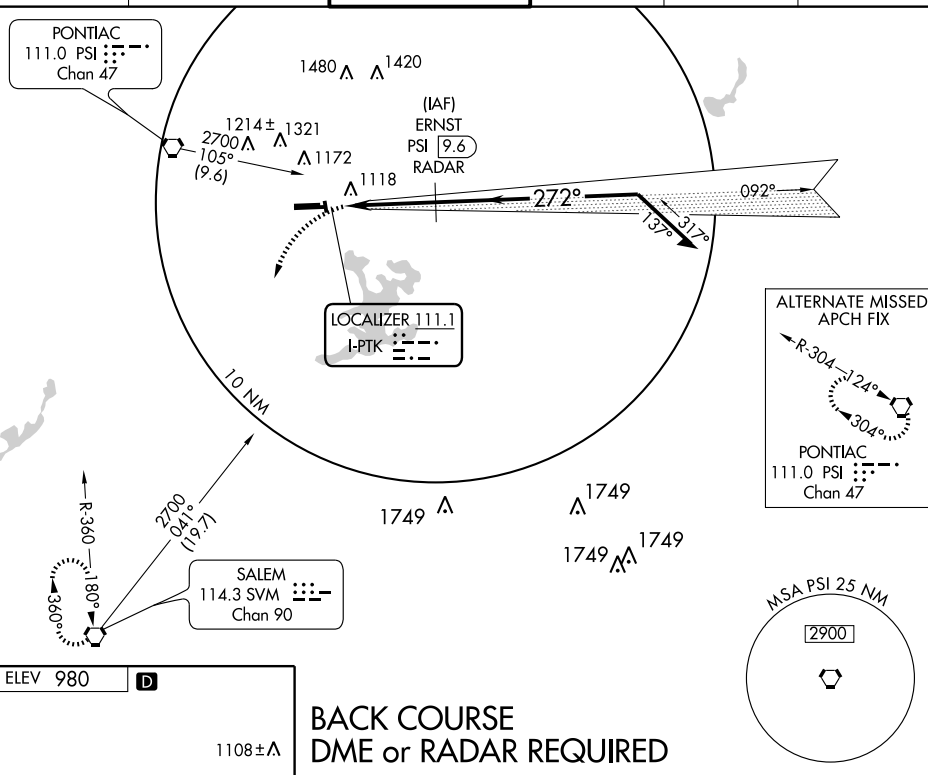
ATIS  
**125.025**

DETROIT APP CON  
127.5 363.2

PONTIAC TOWER ★  
120.5 (CTAF) 

GND CON  
**121.9**

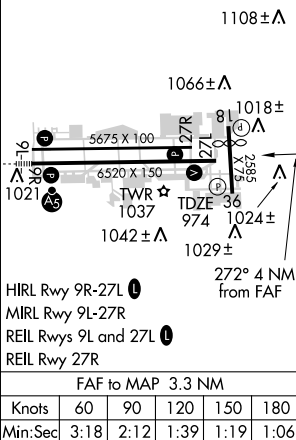
CLNC DE  
**118.25**



UNICOM  
122.95 L

ELEV 980

**D**

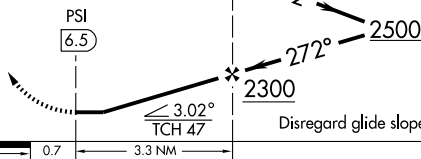
BACK COURSE  
DME or RADAR REQUIRED



3000	SVM
	
	114.3

ERNST  
PSI 9.6  
RADAR

Remain  
within 10 NM



Disregard glide slope indications.

CATEGORY	A	B	C	D
S-27L	1420-1	446 (500-1)	1420-1 $\frac{1}{4}$ 446 (500-1 $\frac{1}{4}$ )	1420-1 $\frac{1}{2}$ 446 (500-1 $\frac{1}{2}$ )
CIRCLING	1500-1 520 (600-1)	1520-1 540 (600-1)	1560-1 $\frac{1}{2}$ 580 (600-1 $\frac{1}{2}$ )	1640-2 660 (700-2)

PONTIAC, MICHIGAN

Amdt 1 22OCT09

PONTIAC/OAKLAND COUNTY INTL (PTK)

42°40'N - 83°25'W

LOC BC RWY 27L

EC-1, 23 SEP 2010 to 21 OCT 2010

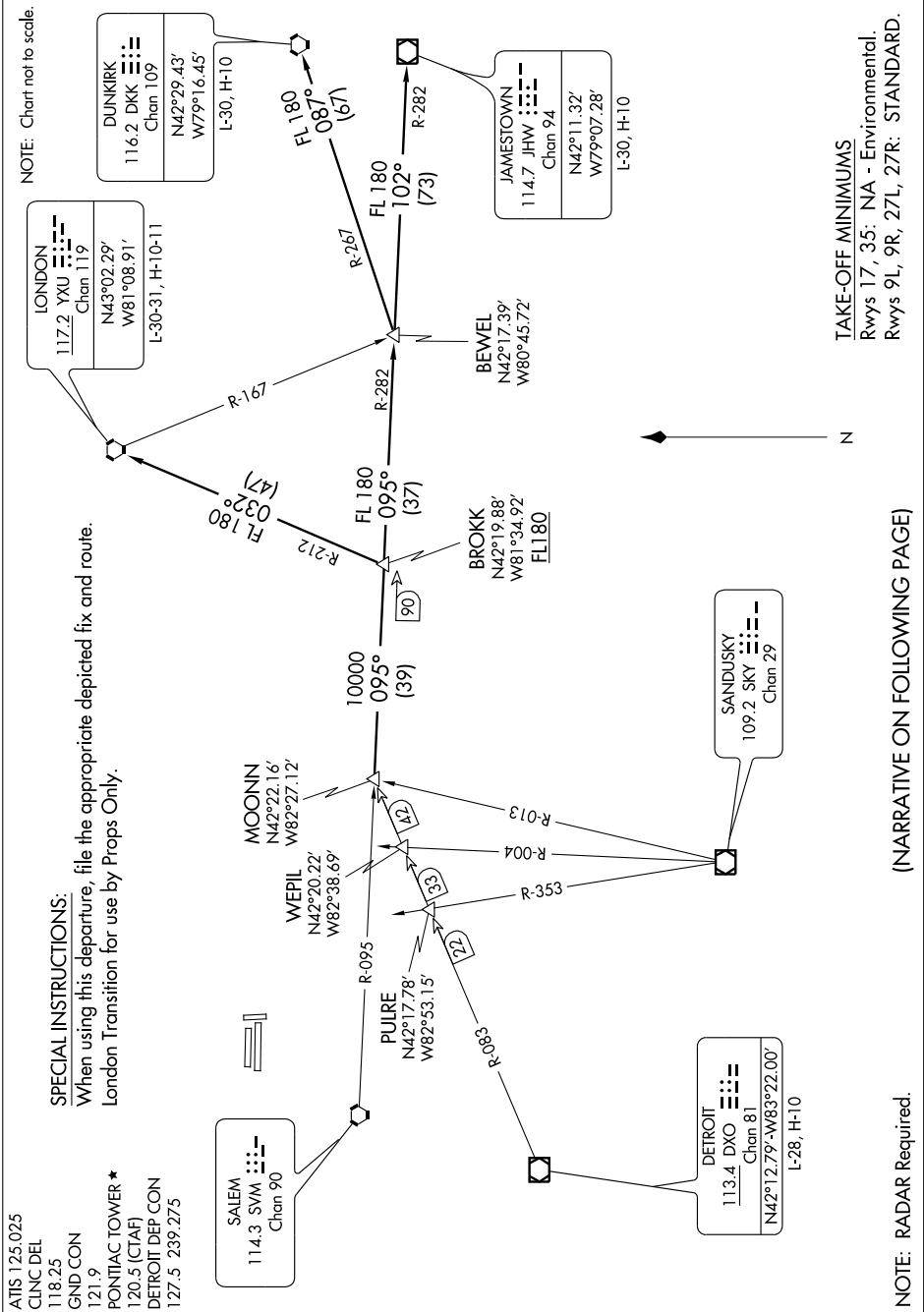
EC-1. 23 SEP 2010 to 21 OCT 2010

# MOONN TWO DEPARTURE

SL-5052 (FAA)

PONTIAC /OAKLAND COUNTY INTL (PTK)

PONTIAC, MICHIGAN



# MOONN TWO DEPARTURE

PONTIAC, MICHIGAN

PONTIAC /OAKLAND COUNTY INTL (PTK)



## DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 9L/R AND 27L/R:

Climb via assigned heading for radar vectors to join the assigned SID.  
Maintain 3000 feet, expect clearance to filed altitude/ flight level  
ten (10) minutes after departure.

DUNKIRK TRANSITION (MOONN2.DKK): From over MOONN INT via  
SVM R-095 to BROKK INT, then via SVM R-095 and JHW R-282 to  
BEWEL INT, then via DKK R-267 to DKK VORTAC.

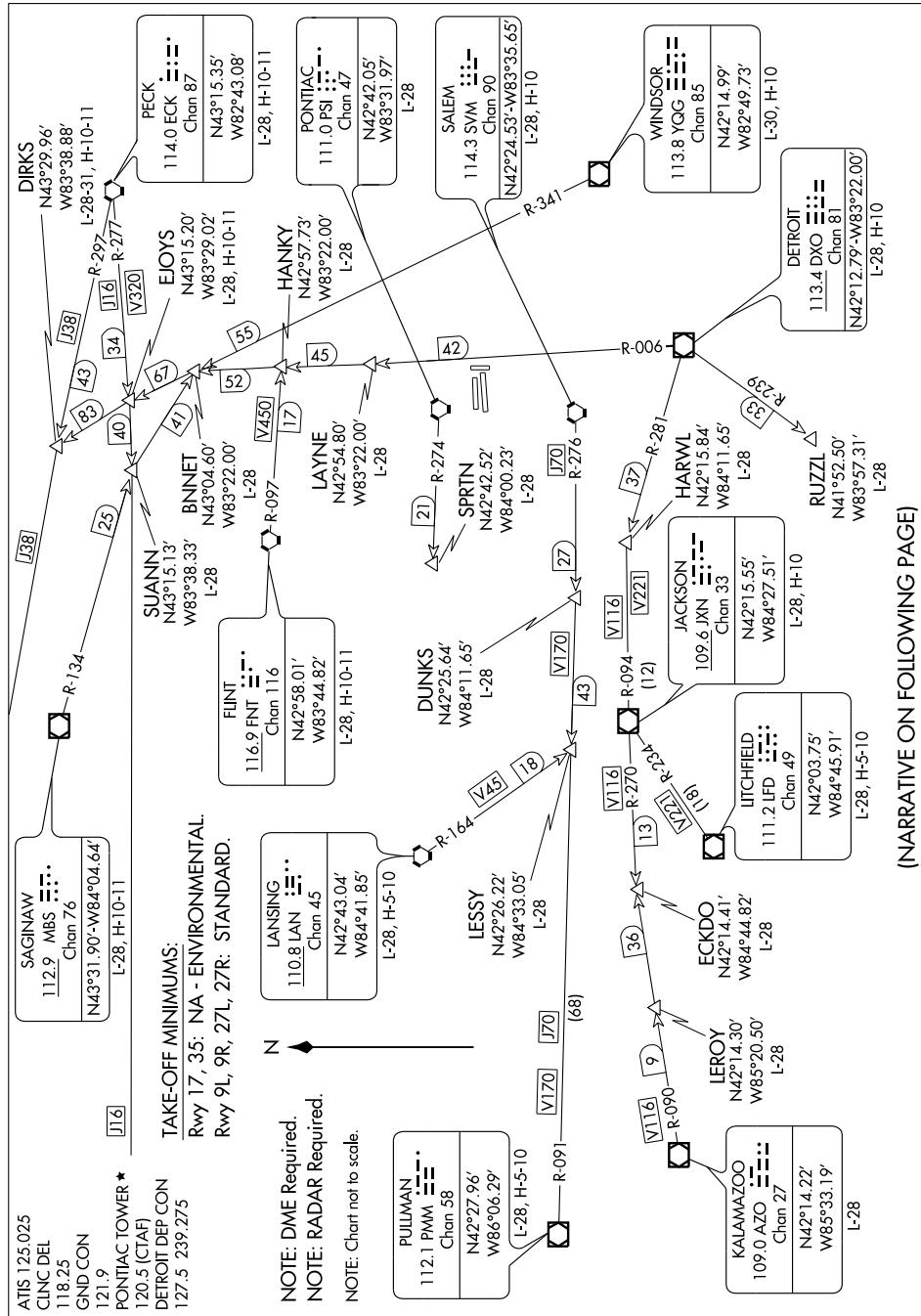
JAMESTOWN TRANSITION (MOONN2.JHW): From over MOONN INT via  
SVM R-095 to BROKK INT, then via SVM R-095 and JHW R-282 to  
BEWEL INT, then via JHW R-282 to JHW VOR/DME.

LONDON TRANSITION (MOONN2.YXU): From over MOONN INT via  
SVM R-095 to BROKK INT, then via YXU R-212 to YXU VORTAC.

TAKE-OFF OBSTACLES

- Rwy 9R: Multiple trees beginning 1382' from DER, 647' left of centerline,  
up to 41' AGL/1011' MSL. Ant on hangar 870' from DER, 732' right of  
centerline, 36' AGL/1006' MSL.
- Rwy 27L: Multiple trees beginning 1075' from DER, 630' left of centerline,  
up to 78' AGL/1048' MSL. Tree 1702' from DER, 945' right of centerline,  
71' AGL/1041' MSL.
- Rwy 27R: Tree 2057' from DER, 395' right of centerline, 71' AGL/1041' MSL.





(NARRATIVE ON FOLLOWING PAGE)

EC-1. 23 SEP 2010 to 21 OCT 2010



## DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 9L/R AND 27L/R: Climb via assigned heading for radar vectors to join the assigned SID. Maintain 3000 feet, expect clearance to filed altitude / flight level ten (10) minutes after departure.

SPECIAL INSTRUCTIONS:

When using this departure, file the appropriate depicted departure fix and route. Aircraft landing/overflying Lansing (LAN) at 10,000 feet or below, file via SPRTN. Aircraft landing/overflying Flint (FNT) at 10,000 feet or below, file via LAYNE. Aircraft landing/overflying Toledo (TOL) at 10,000 feet or below, file via RUZZL. Aircraft over HARWL must file FL220 and below.

TAKE-OFF OBSTACLES:

Rwy 9R: Multiple trees beginning 1382' from DER, 647' left of centerline, up to 41' AGL/1011' MSL. Ant on hangar 870' from DER, 732' right of centerline, 36' AGL/1006' MSL.

Rwy 27L: Multiple trees beginning 1075' from DER, 630' left of centerline, up to 78' AGL/1048' MSL. Tree 1702' from DER, 945' right of centerline, 71' AGL/1041' MSL.

Rwy 27R: Tree 2057' from DER, 395' right of centerline, 71' AGL/1041' MSL.

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010

(RID4.RID) 09127

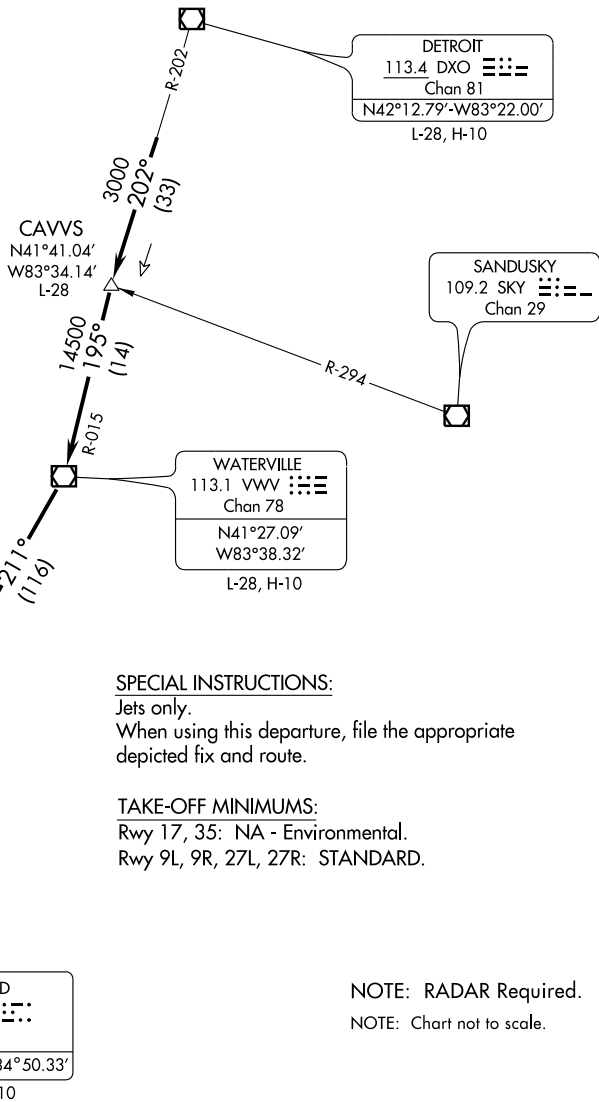
# RICHMOND FOUR DEPARTURE

SL-5052 (FAA)

PONTIAC/OAKLAND COUNTY INTL (PTK)

PONTIAC, MICHIGAN

ATIS 125.025  
CLNC DEL  
118.25  
GND CON  
121.9  
PONTIAC TOWER ★  
120.5 (CTAF)  
DETROIT DEP CON  
127.5 239.275



(NARRATIVE ON FOLLOWING PAGE)

# RICHMOND FOUR DEPARTURE

(RID4.RID) 09127

PONTIAC, MICHIGAN  
PONTIAC/OAKLAND COUNTY INTL (PTK)

EC-1, 23 SEP 2010 to 21 OCT 2010



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 9L/R AND 27L/R:

Climb via assigned heading for radar vectors, thence. . . .

. . . . To intercept DXO VOR/DME R-202 to CAVVS INT/DXO 33 DME, then via VWV R-015 to VWV VOR/DME. Then right turn via VWV R-211 and RID R-031 to RID VORTAC. Maintain 3,000 feet, expect clearance to filed altitude/flight level ten (10) minutes after departure.

TAKE OFF OBSTACLES:

- Rwy 9R: Multiple trees beginning 1382' from DER, 647' left of centerline, up to 41' AGL/1011' MSL.  
Ant on hangar 870' from DER, 732' right of centerline, 36' AGL/1006' MSL.
- Rwy 27L: Multiple trees beginning 1075' from DER, 630' left of centerline, up to 78' AGL/1048' MSL.  
Tree 1702' from DER, 945' right of centerline, 71' AGL/1041'MSL.
- Rwy27R: Tree 2057' from DER, 395' right of centerline, 71' AGL/1041' MSL.

WAAS CH <b>90415</b> <b>W09A</b>	APP CRS <b>092°</b>	Rwy Idg TDZE Apt Elev	<b>6520</b> <b>980</b> <b>980</b>
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# RNAV (GPS) RWY 9R

PONTIAC/OAKLAND COUNTY INTL (PTK)

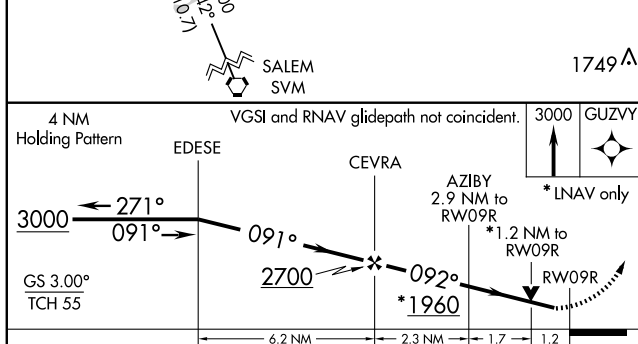
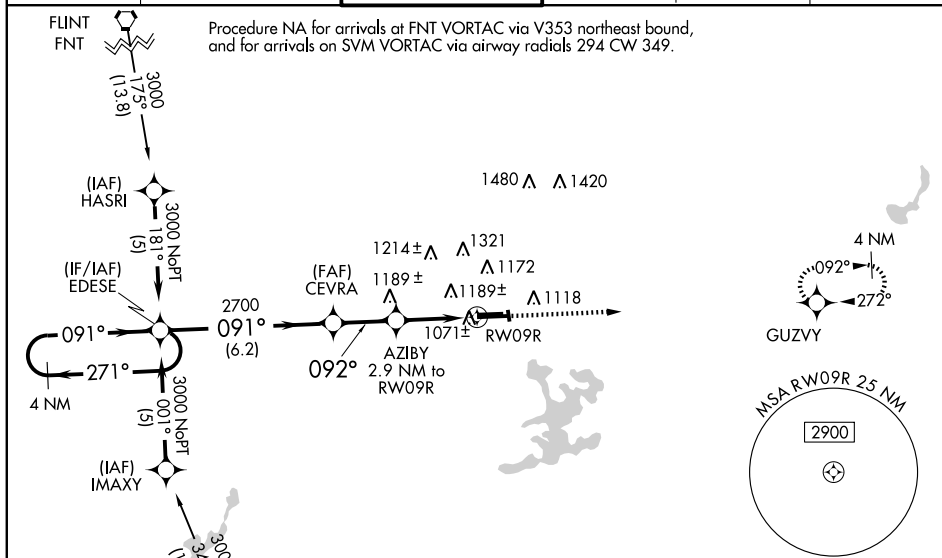
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Coleman A. Young Muni altimeter setting and increase all DA 105 feet and all MDA 120 feet, increase LNAV/VNAV all Cats visibility to 2 miles, increase LNAV Cat C visibility to RVR 5000, Cat D visibility to RVR 6000, and Circling Cat C/D visibility ½ mile. For inoperative MALSR increase LNAV Cats A/B visibility to RVR 5000. For inoperative MALSR when using Coleman A. Young Muni altimeter setting; increase LPV all Cats, and LNAV Cats A/B visibility to RVR 5000. Baro-VNAV and VDP NA when using Coleman A. Young Muni altimeter setting.

MALSR

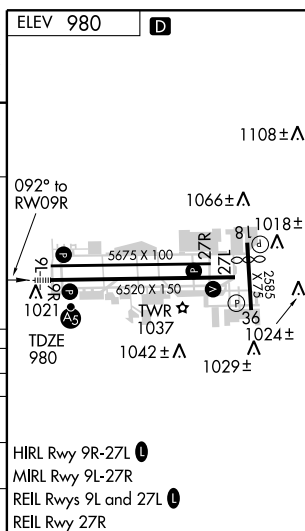


MISSED APPROACH:  
Climb to 3000  
direct GUZZY and  
hold.

ATIS <b>125.025</b>	DETROIT APP CON <b>127.5 363.2</b>	PONTIAC TOWER ★ <b>120.5</b> (CTAF)	GND CON <b>121.9</b>	CLNC DEL <b>118.25</b>	UNICOM <b>122.95</b>
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CATEGORY	A	B	C	D
LPV DA	1180/24		200 (200-½)	
LNAV/VNAV DA	1579-1½		599 (600-1½)	
LNAV MDA	1420/40		440 (500-¾)	
			1420/50 440 (500-1)	
CIRCLING	1500-1 520 (600-1)	1520-1 540 (600-1)	1560-1½ 580 (600-1½)	1640-2 660 (700-2)



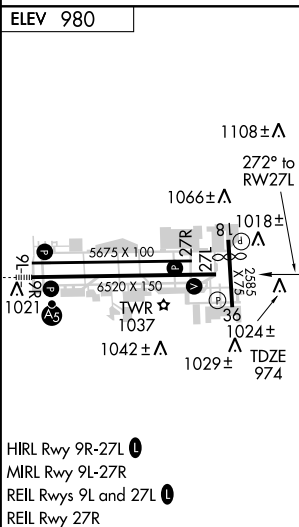
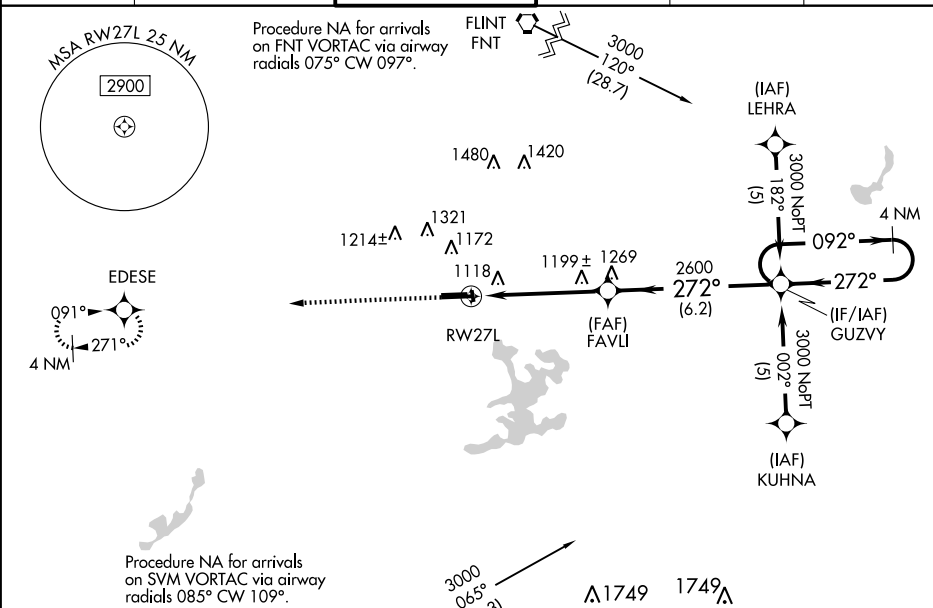
WAAS CH <b>70615</b> <b>W27A</b>	APP CRS <b>272°</b>	Rwy Idg TDZE Apt Elev	<b>6520</b> <b>974</b> <b>980</b>
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# RNAV (GPS) RWY 27L

PONTIAC/OAKLAND COUNTY INTL (PTK)

<p>▼ For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F).</p> <p>▲ DME/DME RNP-0.3 NA. When local altimeter setting not received, use Coleman A. Young Muni altimeter setting and increase all DA 105 feet and all MDA 120 feet, increase LPV and LNAV/VNAV all Cats visibility ¼ mile, LNAV Cat C/D, and Circling Cat C/D visibility ½ mile.</p> <p>Baro-VNAV and VDP NA when using Coleman A. Young Muni altimeter setting.</p>	<p>MISSED APPROACH: Climb to 3000 direct EDESE and hold.</p>
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ATIS <b>125.025</b>	DETROIT APP CON <b>127.5 363.2</b>	PONTIAC TOWER ★ <b>120.5</b> (CTAF) <b>AS</b>	GND CON <b>121.9</b>	CLNC DEL <b>118.25</b>	UNICOM <b>122.95</b> <b>0</b>
------------------------	---------------------------------------	--	-------------------------	---------------------------	----------------------------------



SALEM  
SYM

(22.5)

3000

EDESE

\*LNAV Only

RW27L

FAVLI

GUZVY

4 NM Holding Pattern

1749M

1749

092°

272°

3000

272°

2600

GS 3.00°

TCH 47

1.4

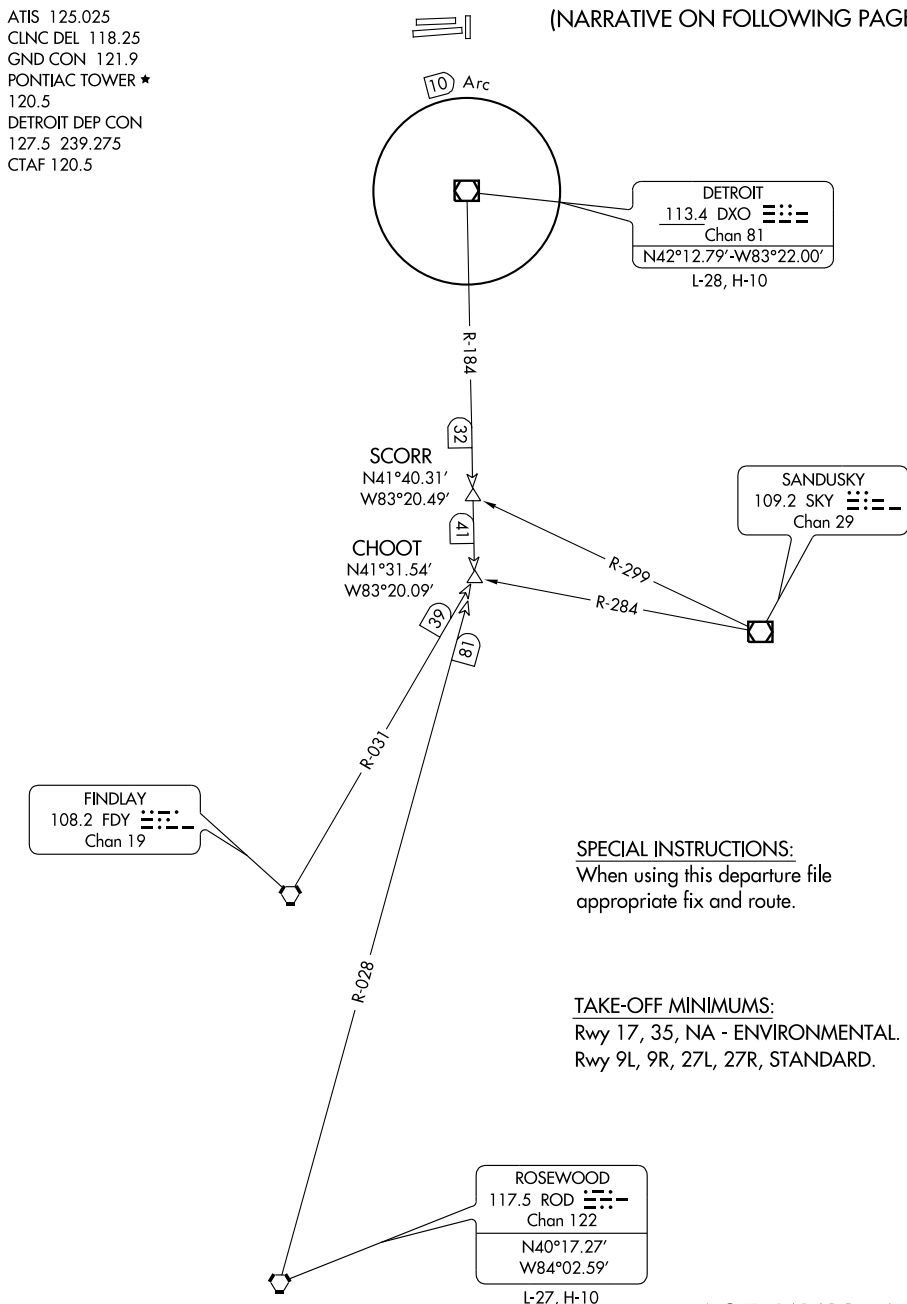
3.5 NM

6.2 NM

CATEGORY	A	B	C	D
LPV DA	1174-3¼ 200 (200-¾)			
LNAV/VNAV DA	1463-1¾ 489 (500-1¾)			
LNAV MDA	1460-1	486 (500-1)	1460-1¼ 486 (500-1¼)	1460-1½ 486 (500-1½)
CIRCLING	1500-1 520 (600-1)	1520-1 540 (600-1)	1560-1½ 580 (600-1½)	1640-2 660 (700-2)

ATIS 125.025  
CLNC DEL 118.25  
GND CON 121.9  
PONTIAC TOWER ★  
120.5  
DETROIT DEP CON  
127.5 239.275  
CTAF 120.5

(NARRATIVE ON FOLLOWING PAGE)



## ROSEWOOD TWO DEPARTURE SL-5052 (FAA)

PONTIAC, MICHIGAN



## DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 9L/R AND 27L/R: Climb via assigned heading for radar vectors to join the assigned SID. Maintain 3000 feet, expect clearance to filed altitude / flight level ten (10) minutes after departure.

TAKE-OFF OBSTACLES:

Rwy 9R: Multiple trees beginning 1382' from DER, 647' left of centerline, up to 41' AGL/1011' MSL. Ant on hangar 870' from DER, 732' right of centerline, 36' AGL/1006' MSL.

Rwy 27L: Multiple trees beginning 1075' from DER, 630' left of centerline, up to 78' AGL/1048' MSL. Tree 1702' from DER, 945' right of centerline, 71' AGL/1041' MSL.

Rwy 27R: Tree 2057' from DER, 395' right of centerline, 71' AGL/1041' MSL.

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010



(SPRTN.SPRTN3) 10210

ST-118 (FAA)

## SPRTN THREE ARRIVAL

DETROIT, MICHIGAN

DETROIT APP CON

127.5 239.275

WILLOW RUN ATIS 127.425

PONTIAC ATIS 125.025

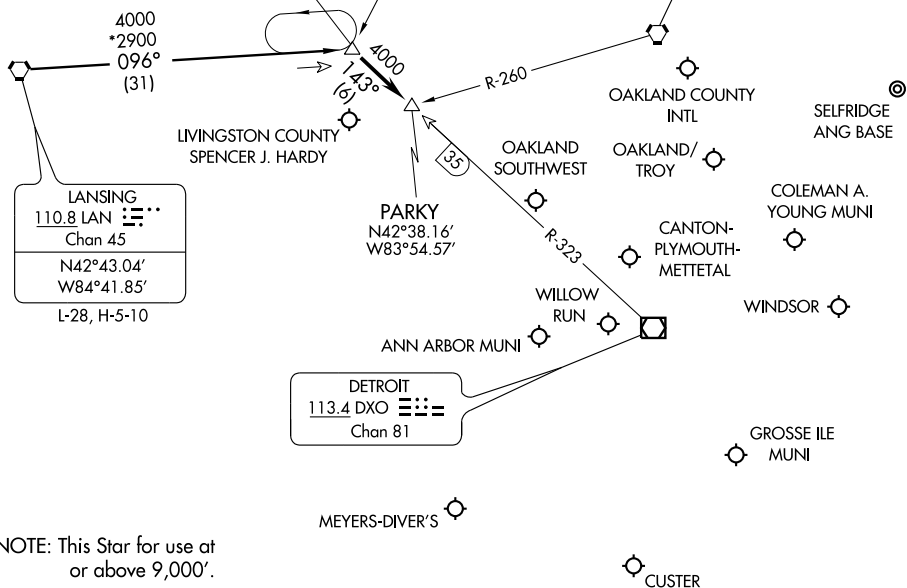
COLEMAN A. YOUNG ATIS 124.875

WINDSOR ATIS 134.5

SELFREDGE ATIS 125.325 270.1

SPRTN

N42°42.52'-W84°00.23'

VERTICAL NAVIGATION  
PLANNING INFORMATIONTURBOJETS/TURBOPROPS:  
Expect clearance to cross at  
9000'.NOTE: This Star for use at  
or above 9,000'.

NOTE: Chart not to scale.

EC-1, 23 SEP 2010 to 21 OCT 2010

LANSING TRANSITION (LAN.SPRTN3): From over LAN VORTAC via LAN R-096  
to SPRTN INT. Thence . . . .. . . . Aircraft landing: DET, PTK, VLL, D98, MTC, ARB, YIP, ONZ,  
1D2, TTF, Y47, 36MI, OZW, 3TE, YQG: From over SPRTN INT via DXO R-323  
to PARKY INT. Thence . . . .

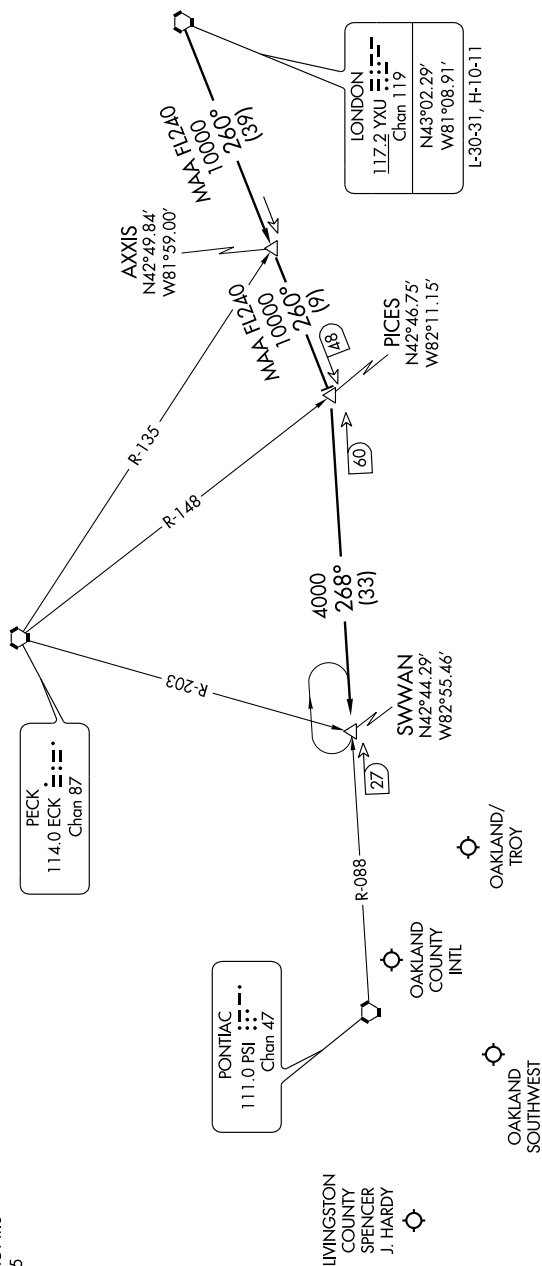
. . . . Expect radar vectors to final approach course.

## SPRTN THREE ARRIVAL

DETROIT, MICHIGAN

(SPRTN.SPRTN3) 10210





## ARRIVAL ROUTE DESCRIPTION

**LONDON TRANSITION (YXU.SWWAN1):** From over YXU VORTAC via YXU R-260 to PICES INT, then via PSI R-088 to SWWAN INT.

NOTE: RADAR Required.  
NOTE: Chart not to scale.

... From SWWAN, expect radar vectors to final approach course.

EC-1. 23 SEP 2010 to 21 OCT 2010



VORTAC PSI	APP CRS	Rwy Idg	<b>6520</b>
<b>111.0</b>	<b>294°</b>	TDZE	<b>974</b>
Chan <b>47</b>		Apt Elev	<b>980</b>

VOR RWY 27L  
PONTIAC/OAKLAND COUNTY INTL (PTK)

**T** Visibility reduction by helicopters NA. When local altimeter setting not received, use Coleman A. Young Muni altimeter setting and increase all MDA 120 feet, increase S-27L Cat C/D and Circling Cat C/D visibility 1/2 mile.

**MISSED APPROACH:** Climbing left turn to 3000 direct SVM VORTAC and hold.

ATIS  
125.025

DETROIT APP CON  
127.5 363.2

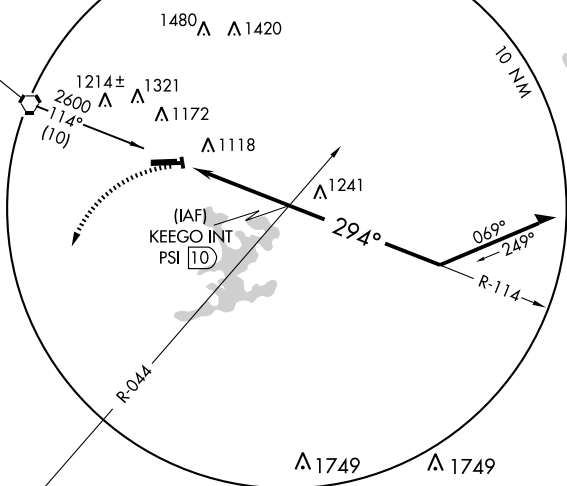
PONTIAC TOWER ★  
120.5 (CTAF) 


GND CON  
**121.9**

CLNC DE  
**118.25**

UNICOM  
122.95 L

PONTIAC  
111.0 PSI  
Chan 47



SALEM  
114.3 SVM   
Chan 90

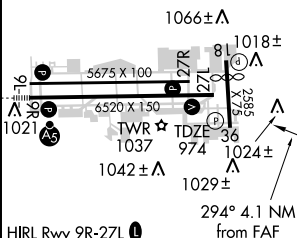
MSA PSI 25 NM

2900

ELEV 980

**D**

1108 ± Δ



MIRL Rwy 9L-27R  
REIL Rwy 9L and 27L  
REIL Rwy 27R

FAF to MAP 4.1 NM

Knots	60	90	120	150	180
Min:Sec	4:06	2:44	2:03	1:38	1:22

PONTIAC, MICHIGAN

Amdt 15 22OCT09

PONTIAC/OAKLAND COUNTY INTL (PTK)

42°40'N - 83°25'W

VOR RWY 27L

EC-1. 23 SEP 2010 to 21 OCT 2010

## PORT HURON

ST CLAIR CO INTL (PHN) 5 SW UTC-5(-4DT) N42°54.66' W82°31.73'

650 B S4 FUEL 100LL, JET A TPA-1650 (1000) LRA NOTAM FILE PHN

DETROIT  
H-10G, 11A, L-30F  
IAP

RWY 04-22: H5104X100 (ASPH-GRVD) S-40, D-55, 2D-90 HIRL

RWY 04: MALSR. PAPI(P4L)—GA 3.0° TCH 31'. Trees.

RWY 22: REIL. PAPI(P4L)—GA 3.0° TCH 30'. Trees.

RWY 10-28: H4000X75 (ASPH) S-16 MIRL

RWY 10: REIL. PAPI (P4L). GA 3.0° TCH 25'. Trees.

RWY 28: REIL. PAPI (P4L). GA 3.5° TCH 31'. Trees.

**AIRPORT REMARKS:** Attended 1300Z±-dusk. Arpt unattended Easter; Thanksgiving and Christmas. Deer and gulls on and invof arpt. Rwy 10 REIL OTS indef. Rwy 28 REIL OTS indef. HIRL Rwy 04-22 and MIRL Rwy 10-28 preset on low ints; to increase ints and ACTIVATE REIL Rwy 22; 10 and 28 and MALSR Rwy 04—CTAF. Ldg fee for commercial and corporate acft. Trans Atlantic flights will have to notify U.S. Customs at 810-985-9541 one hr prior to entry into the U.S. Notify U.S. Dept of Agriculture at 810-985-6126 and arpt manager at 810-364-6890 24 hrs in advance for disposal of acft international trash. Flight Notification Service (ADCUS) avbl.

WEATHER DATA SOURCES: AWOS-3 118.375 (810) 364-7787.

COMMUNICATIONS: CTAF/UNICOM 123.05

Ⓡ SELFRIIDGE APP/DEP CON 119.6 (1230-0400Z±) clsd hol, other times uncontrolled for DHS, ARNG, USCG or emergency ops.

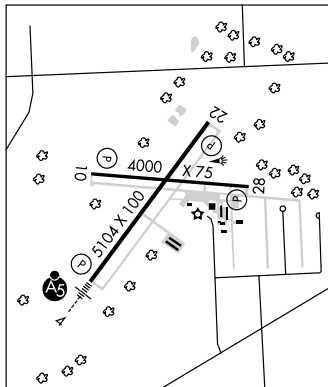
Ⓡ CLEVELAND CENTER APP/DEP CON 127.7 (0400-1230Z±)

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

PECK (H) VORTAC 114.0 ECK Chan 87 N43°15.35' W82°43.08' 165° 22.3 NM to fld. 810/7W. HIWAS.

PHURN NDB (LOM) 332 PH N42°50.57' W82°35.80' 043° 5.1 NM to fld.

ILS 110.9 I-PHN Rwy 04. LOM PHURN NDB.



PRESQUE ISLE CO (See ROGERS CITY)

PRICES (See LINDEN)

PRICKETT-GROOMS FLD (See SIDNAW)

PULLMAN N42°27.96' W86°06.29' NOTAM FILE LAN.

(H) VOR/DME 112.1 PMM Chan 58 072° 13.0 NM to Padgham Fld. 640/00E.

CHICAGO  
H-5E, 10F, L-28I

VOR/DME unusable 080°-068°

DME unusable byd 30 NM blo 3000'.

RCO 122.1R 112.1T (LANSING RADIO)

RAETHER (See HOWELL)

RANDOLPH'S LANDING AREA (See ST JOHNS)

RAY COMMUNITY (57D) 2 SE UTC-5(-4DT) N42°44.21' W82°53.33'

632 B S4 FUEL 100LL NOTAM FILE LAN

DETROIT  
COPTER

RWY 09-27: H2494X60 (ASPH) MIRL

RWY 09: REIL. PAPI(P2L)—GA 3.0° TCH 40'. Trees.

RWY 27: PAPI(P2L). Thld dsplcd 210'. Trees.

RWY 18-36: 2187X123 (ASPH-TURF)

RWY 18: Thld dsplcd 140'. Trees.

RWY 36: Trees.

**AIRPORT REMARKS:** Attended irregularly. Ultralight ops. Rwy 18-36 asph peeling and cracking. ACTIVATE rotating bcn.

MIRL Rwy 09-27 and PAPI Rwy 09 and Rwy 27—CTAF.

COMMUNICATIONS: CTAF/UNICOM 122.7

LOC I-PHN	APP CRS	Rwy Idg	<b>5104</b>
<b><u>110.9</u></b>	<b>043°</b>	TDZE	<b>648</b>
		Apt Elev	<b>650</b>

ILS or LOC RWY 4

PORT HURON / ST. CLAIR COUNTY INTL (PHN)



MALSR

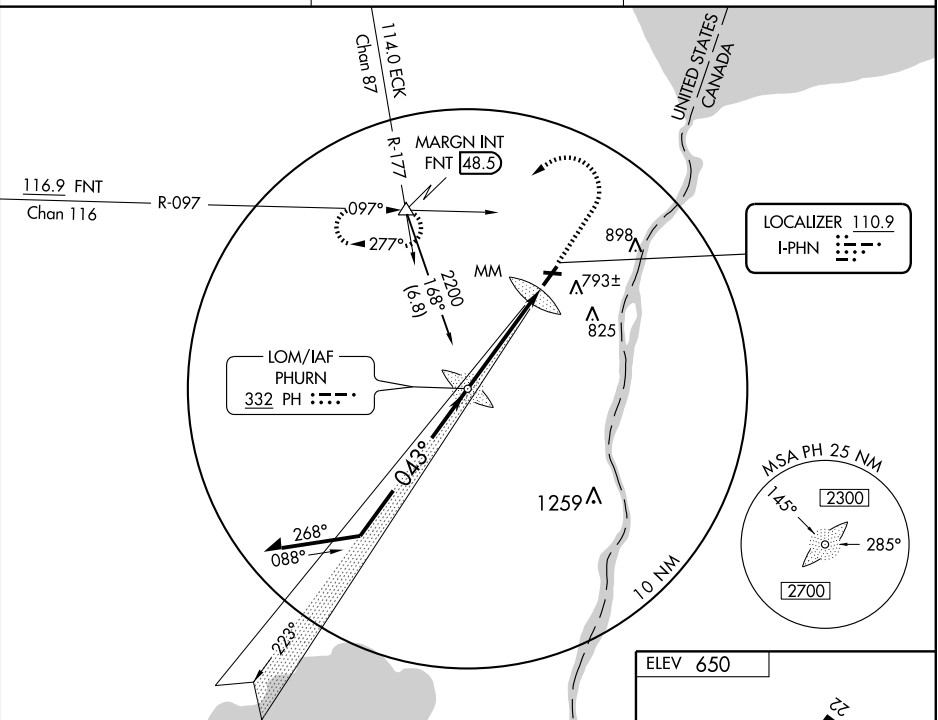


**MISSED APPROACH:** Climb to 4000 via heading 040° then left turn via FNT VORTAC R-097 to MARGN Int/FNT 48.5 DME and hold.

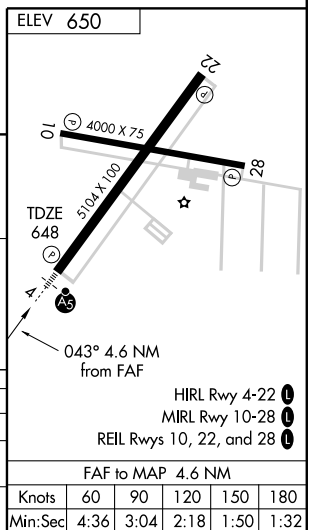
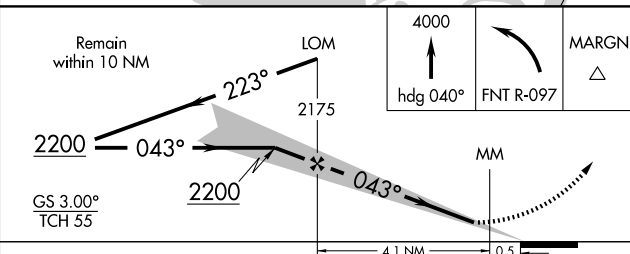
AWOS-3  
**118.375**

SELFREDGE APP CON ★  
119.6 395.9

UNICOM  
123.05 (CTAF) **L**



## ADF REQUIRED



PORT HURON, MICHIGAN

Amdt 3B 06MAY10

PORT HURON / ST. CLAIR COUNTY INTL (PHN)

42°55'N - 82°32'W

ILS or LOC RWY 4

EC-1. 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010

LOM PH <b>332</b>	APP CRS <b>043°</b>	Rwy ldg TDZE Apt Elev	<b>5104</b> <b>648</b> <b>650</b>
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**NDB or GPS RWY 4**

PORT HURON / ST. CLAIR COUNTY INTL (PHN)

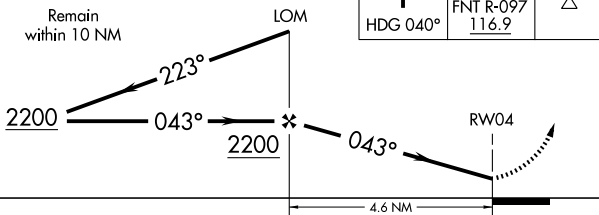
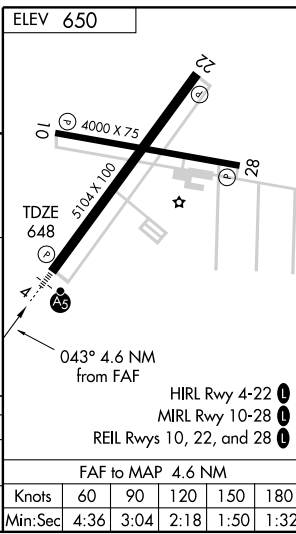
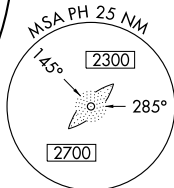
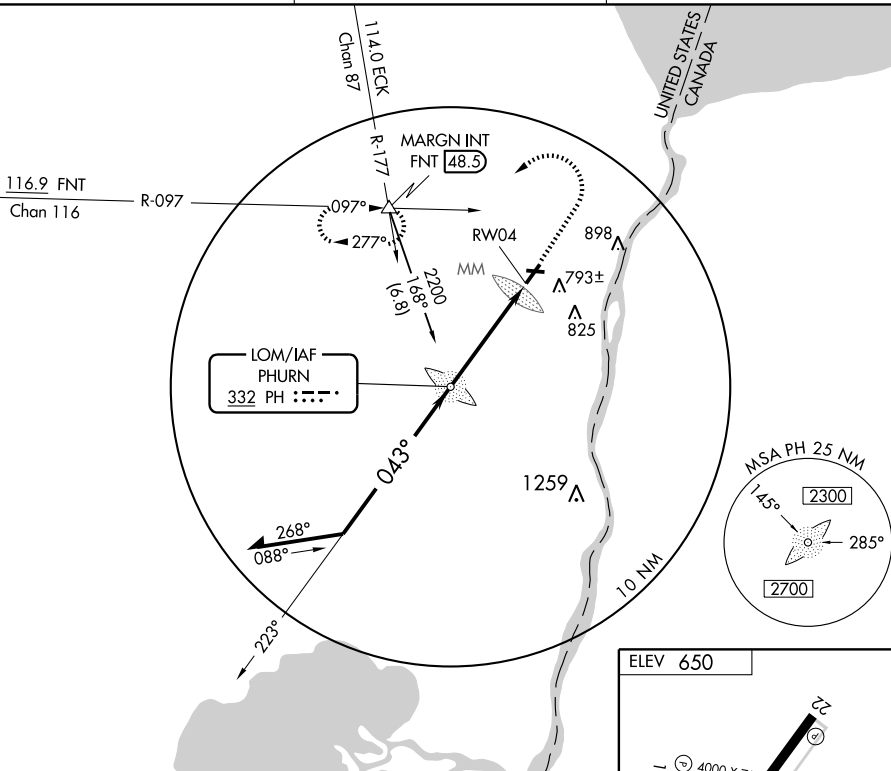


MISSED APPROACH: Climb to 4000 via heading 040° then left turn via FNT VORTAC R-097 to MARGN Int/FNT 48.5 DME and hold.

AWOS-3  
**118.375**

SELFRIIDGE APP CON ★  
**119.6 395.9**

UNICOM  
**123.05** (CTAF) **0**



CATEGORY	A	B	C	D
S-4	1180-¾ 532 (600-¾)		1180-1 532 (600-1)	1180-1½ 530 (600-1½)
CIRCLING	1180-1 530 (600-1)		1180-1½ 530 (600-1½)	1200-2 550 (600-2)

FAF to MAP 4.6 NM					
Knots	60	90	120	150	180
Min:Sec	4:36	3:04	2:18	1:50	1:32



VORTAC ECK <b>114.0</b> Chan <b>87</b>	APP CRS <b>165°</b>	Rwy ldg TDZE Apt Elev <b>N/A</b> <b>N/A</b> <b>650</b>
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**VOR/DME or GPS-A**

PORT HURON / ST. CLAIR COUNTY INTL (PHN)

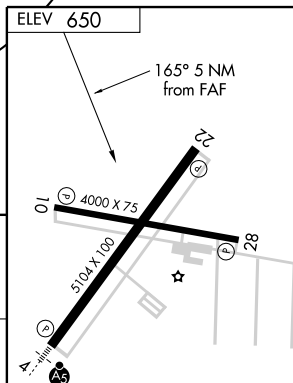
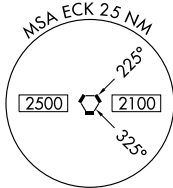
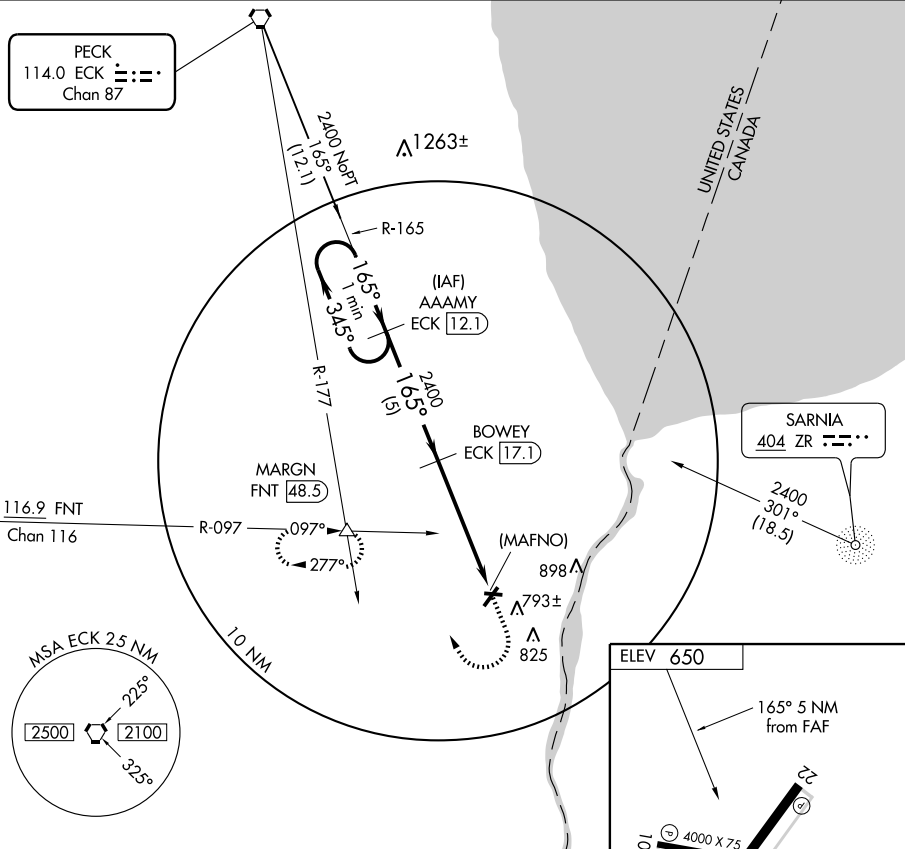


MISSED APPROACH: Climb to 4000 via ECK R-165 then right turn heading 340° and FNT VORTAC R-097 to MARGN Int/FNT 48.5 DME and hold.

AWOS-3  
**118.375**

SELFIDGE APP CON ★  
**119.6 395.9**

UNICOM  
**123.05** (CTAF) **0**



One Minute  
Holding Pattern

AAAMY  
ECK [12.1]

BOWEY  
ECK [17.1]

4000  
ECK R-165

MARGN

2400

345°

165°

2400

165°

(MAFNO)  
ECK [22.1]

5 NM 5 NM

CATEGORY	A	B	C	D
CIRCLING	1160-1 510 (600-1)	1160-1¼ 510 (600-1¼)	1160-1½ 510 (600-1½)	1200-2 550 (600-2)

HIRL Rwy 4-22 **0**

MIRL Rwy 10-28 **0**

REIL Rwy 10, 22, and 28 **0**

VORTAC ECK <b>114.0</b> Chan <b>87</b>	APP CRS <b>223°</b>	Rwy ldg TDZE <b>649</b> Apt Elev <b>650</b>
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# VOR/DME RNAV or GPS RWY 22

PORT HURON / ST. CLAIR COUNTY INTL (PHN)

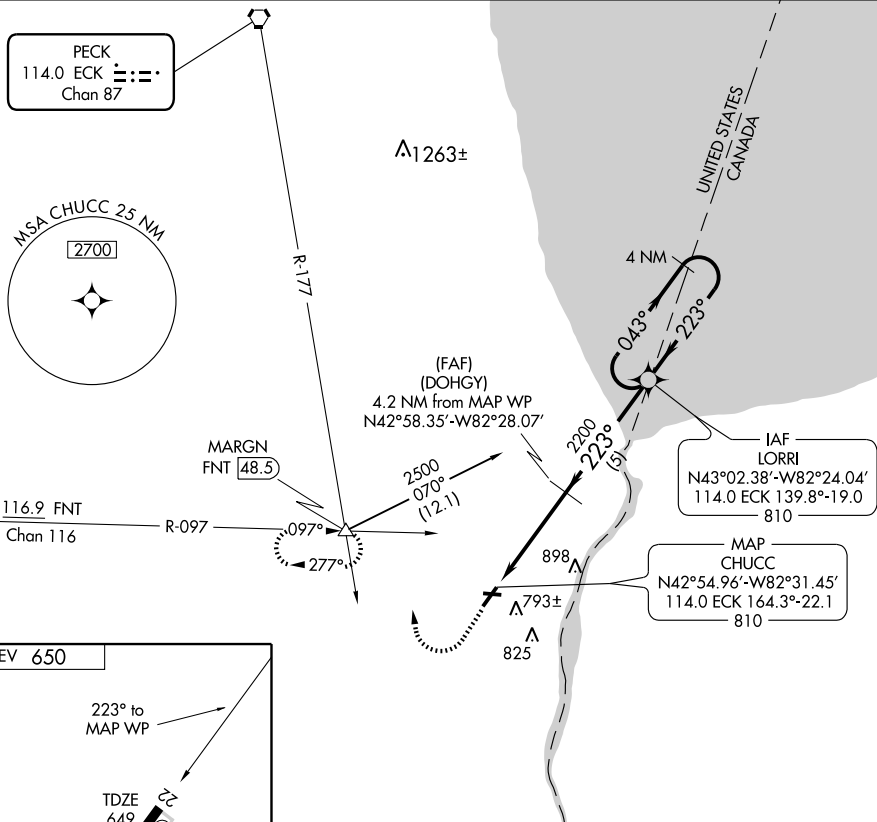


MISSED APPROACH: Climb to 4000 via heading 220° then right turn via heading 360° and FNT VORTAC R-097 to MARGN Int/FNT 48.5 DME and hold.

AWOS-3  
**118.375**

SELFRIIDGE APP CON ★  
**119.6 395.9**

UNICOM  
**123.05** (CTAF) **0**



ELEV 650

223° to  
MAP WP

TDZE

649

22

5104 X 100

28

A5

A5

HIRL Rwy 4-22

MIRL Rwy 10-28

REIL Rwy 10, 22, and 28

4000	HDG 220°	MARGN △	(DOHGY) 4.2 NM from MAP WP	LORRI WP	4 NM Holding Pattern
4000 X 75	HDG 360° FNT R-097 116.9	CHUCC MAP WP	2200	2200	2500
10	223°	223°	223°	043°	223°
4.2 NM	5 NM				
CATEGORY	A	B	C	D	
S-22	1220-1	571 (600-1)	1220-1½ 571 (600-1½)	1220-1¾ 571 (600-1¾)	
CIRCLING	1220-1	570 (600-1)	1220-1½ 570 (600-1½)	1220-2 570 (600-2)	

## ROGERS CITY

PRESQUE ISLE CO (PZQ) 1 S UTC-5(-4DT) N45°24.43' W83°48.77'

LAKE HURON

670 B NOTAM FILE LAN

L-31C

RWY 09-27: H4105X75 (ASPH) S-22 MIRL

IAP

RWY 09: REIL. PAPI(P4L)—GA 3.0° TCH 35'. Thld dspcd 220'.  
Trees.RWY 27: REIL. PAPI(P4L)—GA 3.0° TCH 34'. Thld dspcd 380'.  
P-line.**AIRPORT REMARKS:** Unattended. Deer and birds on and invof arpt.  
Confirm snow removal and winter conditions; phone  
989-734-2216 or arpt manager 989-734-4309. ACTIVATE MIRL  
Rwy 09-27, PAPI Rwy 09 and Rwy 27, REIL Rwy 09 and Rwy  
27—CTAF.**WEATHER DATA SOURCES:** AWOS-3 118.125 (989) 734-7419.**COMMUNICATIONS:** CTAF 122.9

ALPENA RCO 122.1R 108.8T (LANSING RADIO)

Ⓡ ALPENA APP/DEP CON 128.425 (Weekdays 1300-2100Z)

Ⓡ MINNEAPOLIS CENTER APP/DEP CON 128.425 (2100-1300Z)

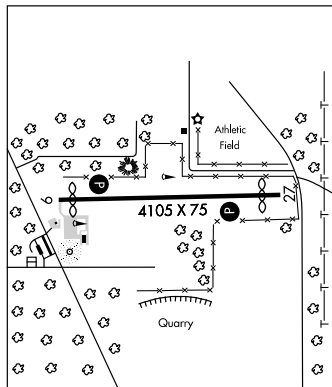
**RADIO AIDS TO NAVIGATION:** NOTAM FILE APN.

ALPENA (L) VORTAC 108.8 APN Chan 25 N45°04.97'

W83°33.42' 338° 22.3 NM to fld. 677/7W. HIWAS.

ROGERS CITY NDB (MHW) 215 PZQ N45°24.28' W83°49.22' at fld.

NOTAM FILE LAN.



ROMEO STATE (D98) 2 E UTC-5(-4DT) N42°47.78' W82°58.46'

DETROIT

739 B FUEL 100LL, JET A NOTAM FILE LAN

COPTER

RWY 18-36: H4000X75 (ASPH) MIRL

L-28J

RWY 18: REIL. PAPI(P4L)—GA 3.0° TCH 20'. Thld dspcd 470'. Trees.

IAP

RWY 36: REIL. PAPI(P4L)—GA 3.0° TCH 22'. Road.

**AIRPORT REMARKS:** Attended Jun-Sep 1400Z+—dusk, Oct-May  
1400-2300Z+. Deer on and invof rwy. ACTIVATE MIRL Rwy 18-36,  
PAPI Rwy 18 and Rwy 36 and REIL Rwy 18 and Rwy 36—CTAF.**COMMUNICATIONS:** CTAF/UNICOM 122.8

PONTIAC RCO 122.15R 111.0T (LANSING RADIO)

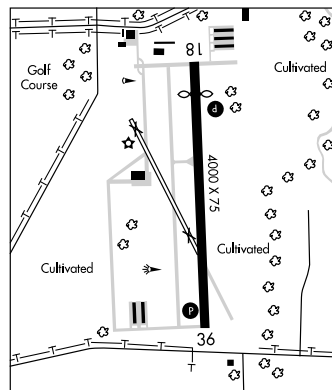
Ⓡ SELFDRIDGE APP/DEP CON 119.6 (1230-0400Z) clsd hol, other times  
uncontrolled for DHS, ARNG, USCG or emergency ops.

Ⓡ CLEVELAND CENTER APP/DEP CON 127.7 (0400-1230Z)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE PTK.

PONTIAC (L) VORTAC 111.0 PSI Chan 47 N42°42.05'

W83°31.97' 080° 25.3 NM to fld. 1148/3W.

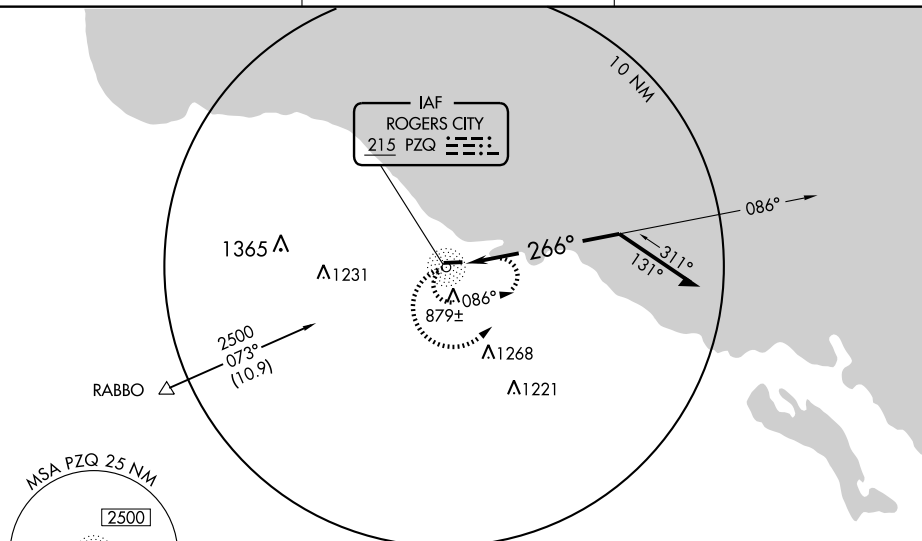


NDB PZQ  
**215**APP CRS  
**266°**Rwy Idg  
TDZE  
Apt Elev  
**3725**  
**670**  
**670****NDB RWY 27**

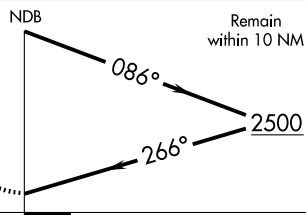
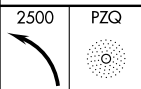
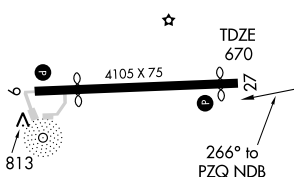
ROGERS CITY / PRESQUE ISLE COUNTY (PZQ)

**NA** When local altimeter setting not received, use Alpena County altimeter setting and increase all MDA 60 feet and increase S-27 and Circling Cat C visibility ¼ mile.

MISSED APPROACH: Climbing left turn to 2500 in PZQ NDB holding pattern.

AWOS-3  
**118.125**ALPENA APP CON ★  
**128.425 379.3**CTAF  
**122.9 0**

ELEV 670



CATEGORY	A	B	C	D
S-27	1300-1	630 (700-1)	1300-1¾ 630 (700-1¾)	NA
CIRCLING	1300-1	630 (700-1)	1300-1¾ 630 (700-1¾)	NA

MIRL Rwy 9-27  
REIL Rws 9 and 27

ROGERS CITY, MICHIGAN  
Amdt 3A 06MAY10

ROGERS CITY / PRESQUE ISLE COUNTY (PZQ)

45°24'N - 83°49'W

**NDB RWY 27**

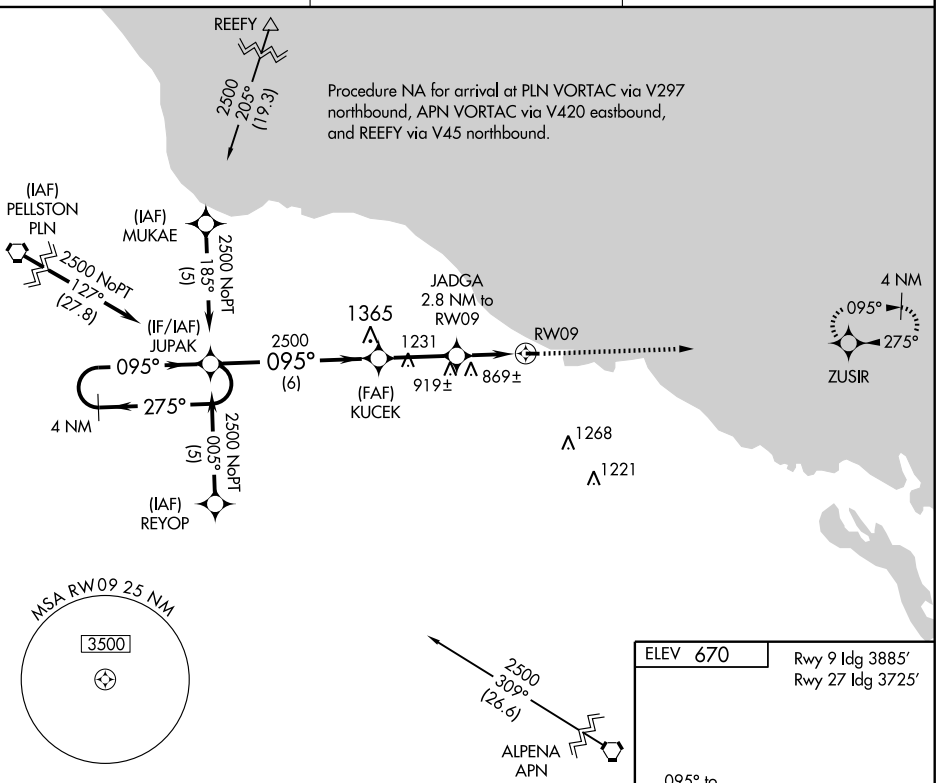
## RNAV (GPS) RWY 9

ROGERS CITY / PRESQUE ISLE COUNTY (PZQ)

APP CRS <b>095°</b>	Rwy ldg <b>3885</b>
TDZE <b>669</b>	
Apt Elev <b>670</b>	

<p><b>▼</b> DME/DME RNP-0.3 NA. If local altimeter setting not received, use Alpena County Rgnl altimeter setting and increase all MDAs 60 feet. When VGSIL inop, straight-in/circling Rwy 9 NA at night.</p> <p><b>▲</b> NA</p>	<p>MISSED APPROACH: Climb to 2300 direct ZUSIR and hold.</p>
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<p>AWOS-3 <b>118.125</b></p>	<p>ALPENA APP CON ★ <b>128.425 379.3</b></p>	<p>CTAF <b>122.9 0</b></p>
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<p>4 NM Holding Pattern</p> <p>JUPAK</p> <p>KUCEK</p> <p>JADGA 2.8 NM to RW09</p> <p>RW09</p> <p>2300</p> <p>ZUSIR</p> <p>095° to RW09</p> <p>4105 X 75</p> <p>27</p> <p>TDZE 669</p> <p>813</p> <p>3.05° TCH 35 1600</p> <p>6 NM</p> <p>2.8 NM</p> <p>2.8 NM</p>				
CATEGORY	A	B	C	D
LNAV MDA	1120-1	451 (500-1)	1120-1½ 451 (500-1½)	NA
CIRCLING	1200-1 530 (600-1)	1220-1 550 (600-1)	1220-1½ 550 (600-1½)	NA

ELEV 670

Rwy 9 ldg 3885'

Rwy 27 ldg 3725'

REIL Rwy 9 and 27 0

MRL Rwy 9-27 0

APP CRS <b>275°</b>	Rwy Idg TDZE Apt Elev	<b>3725</b> <b>670</b> <b>670</b>
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## RNAV (GPS) RWY 27

ROGERS CITY / PRESQUE ISLE COUNTY (PZQ)

**NA** DME/DME RNP-0.3 NA. Circling NA at night to Rwy 9.  
If local altimeter setting not received, use Alpena County  
Rgnl altimeter setting and increase all MDAs 60 feet.  
VDP NA with Alpena County Rgnl altimeter setting.

MISSED APPROACH: Climb to  
2500 direct JUPAK and hold.

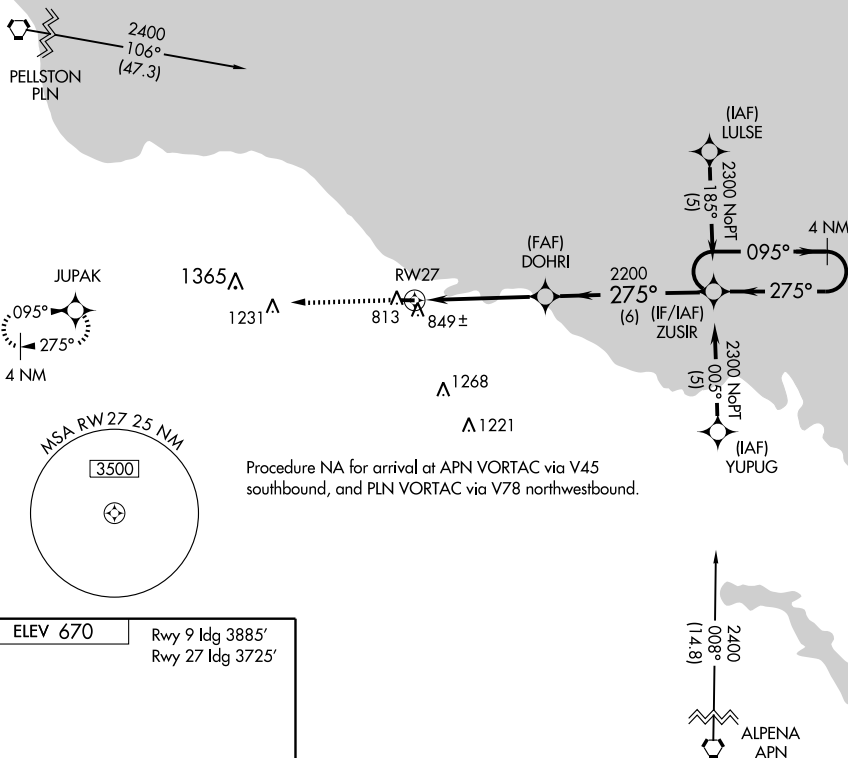
AWOS-3

**118.125**

ALPENA APP CON ★

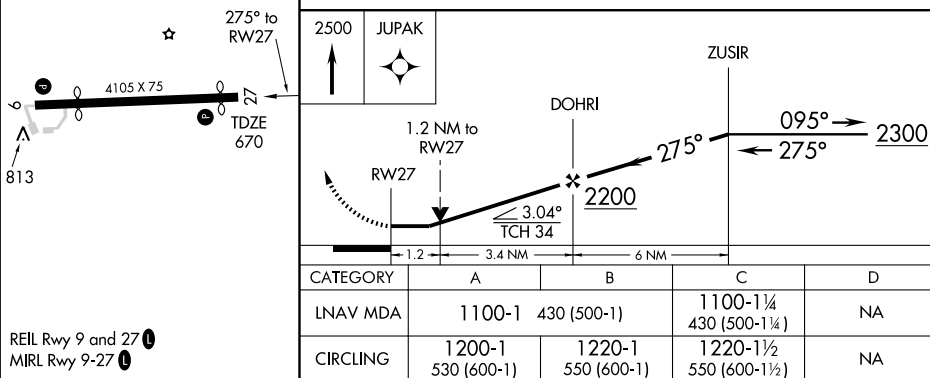
**128.425 379.3**

CTAF

**122.9**

ELEV 670

Rwy 9 Idg 3885'  
Rwy 27 Idg 3725'



ROGERS CITY, MICHIGAN

Orig 07242

ROGERS CITY / PRESQUE ISLE COUNTY (PZQ)

45°24'N - 83°49'W

## RNAV (GPS) RWY 27

## ROGERS CITY

PRESQUE ISLE CO (PZQ) 1 S UTC-5(-4DT) N45°24.43' W83°48.77'

LAKE HURON

670 B NOTAM FILE LAN

L-31C

RWY 09-27: H4105X75 (ASPH) S-22 MIRL

IAP

RWY 09: REIL. PAPI(P4L)—GA 3.0° TCH 35'. Thld dspcd 220'.  
Trees.RWY 27: REIL. PAPI(P4L)—GA 3.0° TCH 34'. Thld dspcd 380'.  
P-line.**AIRPORT REMARKS:** Unattended. Deer and birds on and invof arpt.  
Confirm snow removal and winter conditions; phone  
989-734-2216 or arpt manager 989-734-4309. ACTIVATE MIRL  
Rwy 09-27, PAPI Rwy 09 and Rwy 27, REIL Rwy 09 and Rwy  
27—CTAF.**WEATHER DATA SOURCES:** AWOS-3 118.125 (989) 734-7419.**COMMUNICATIONS:** CTAF 122.9

ALPENA RCO 122.1R 108.8T (LANSING RADIO)

Ⓡ ALPENA APP/DEP CON 128.425 (Weekdays 1300-2100Z)

Ⓡ MINNEAPOLIS CENTER APP/DEP CON 128.425 (2100-1300Z)

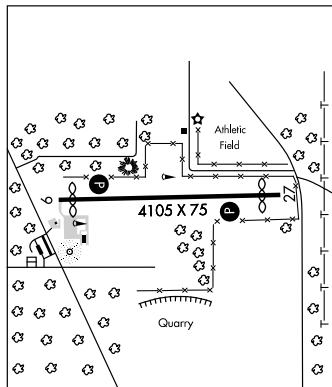
**RADIO AIDS TO NAVIGATION:** NOTAM FILE APN.

ALPENA (L) VORTAC 108.8 APN Chan 25 N45°04.97'

W83°33.42' 338° 22.3 NM to fld. 677/7W. HIWAS.

ROGERS CITY NDB (MHW) 215 PZQ N45°24.28' W83°49.22' at fld.

NOTAM FILE LAN.



ROMEO STATE (D98) 2 E UTC-5(-4DT) N42°47.78' W82°58.46'

DETROIT

739 B FUEL 100LL, JET A NOTAM FILE LAN

COPTER

RWY 18-36: H4000X75 (ASPH) MIRL

L-28J

RWY 18: REIL. PAPI(P4L)—GA 3.0° TCH 20'. Thld dspcd 470'. Trees.

IAP

RWY 36: REIL. PAPI(P4L)—GA 3.0° TCH 22'. Road.

**AIRPORT REMARKS:** Attended Jun-Sep 1400Z+—dusk, Oct-May  
1400-2300Z+. Deer on and invof rwy. ACTIVATE MIRL Rwy 18-36,  
PAPI Rwy 18 and Rwy 36 and REIL Rwy 18 and Rwy 36—CTAF.**COMMUNICATIONS:** CTAF/UNICOM 122.8

PONTIAC RCO 122.15R 111.0T (LANSING RADIO)

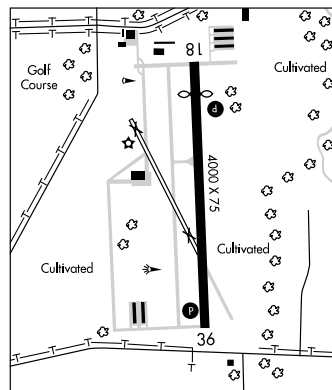
Ⓡ SELFDRIDGE APP/DEP CON 119.6 (1230-0400Z) clsd hol, other times  
uncontrolled for DHS, ARNG, USCG or emergency ops.

Ⓡ CLEVELAND CENTER APP/DEP CON 127.7 (0400-1230Z)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE PTK.

PONTIAC (L) VORTAC 111.0 PSI Chan 47 N42°42.05'

W83°31.97' 080° 25.3 NM to fld. 1148/3W.



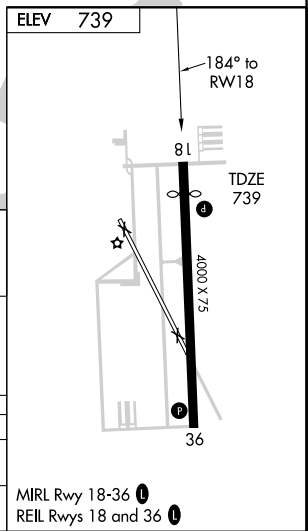
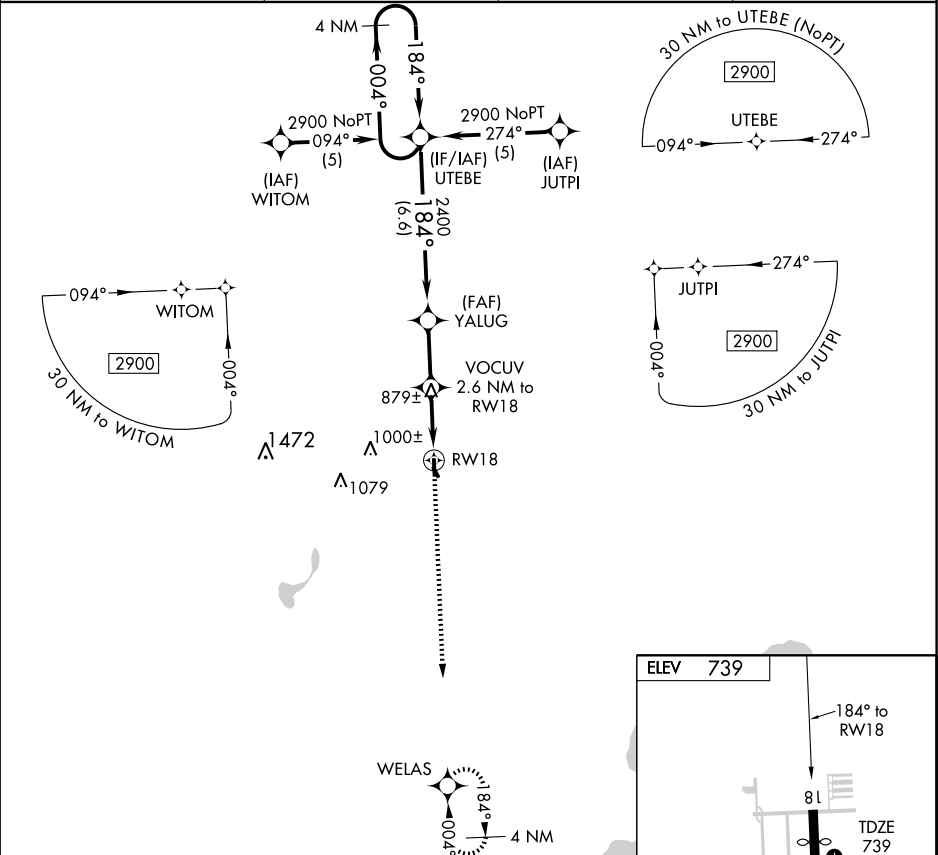
APP CRS <b>184°</b>	Rwy Idg TDZE Apt Elev	<b>4000</b> <b>739</b> <b>739</b>
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# RNAV (GPS) RWY 18

ROMEO STATE (D98)

<p><b>▼</b> DME/DME RNP-0.3 NA. <b>▲ NA</b> Use Coleman A. Young Muni altimeter setting, if not received use Pontiac altimeter setting and increase all MDA 20 feet.</p>	MISSED APPROACH: Climb to 2900 direct WELAS and hold.
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COLEMAN A. YOUNG MUNI ASOS <b>124.875</b>	SELFREDGE APP CON ★ <b>119.6 395.9</b>	GCO <b>121.725</b>	UNICOM <b>122.8</b> (CTAF) <b>0</b>
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CATEGORY	A	B	C	D
LNAV MDA	1200-1 461 (500-1)	1200-1 461 (500-1)	1200-1 461 (500-1)	1200-1 461 (500-1)
CIRCLING	1280-1 541 (600-1)	1280-1 541 (600-1)	1280-1 541 (600-1)	1280-1 541 (600-1)



APP CRS 004°  
Rwy Idg 4000  
TDZE 736  
Apt Elev 739

# RNAV (GPS) RWY 36

ROMEO STATE (D98)

**NA** DME/DME RNP-0.3 NA.  
Use Coleman A. Young Muni altimeter setting, if not received use Pontiac altimeter setting and increase all MDA 20 feet.

MISSED APPROACH: Climb to 2900 direct UTEBE and hold.

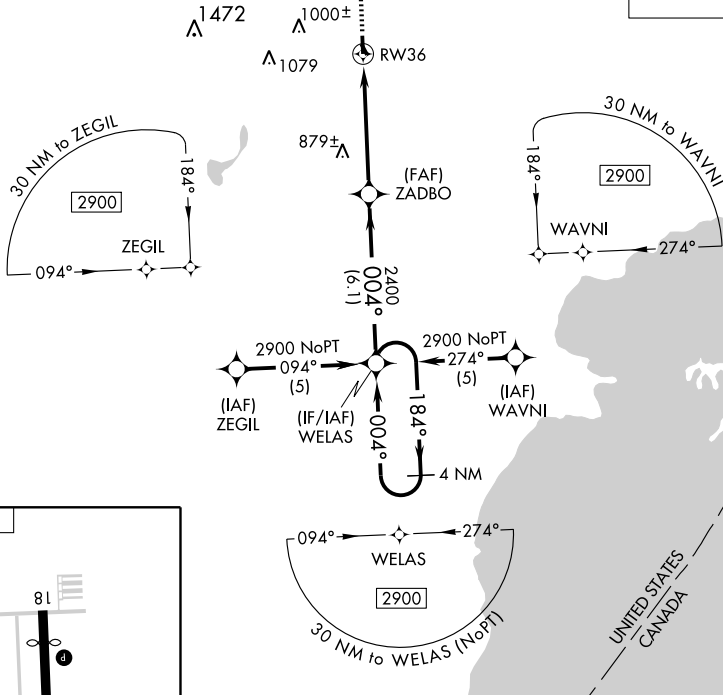
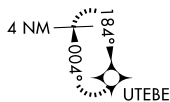
COLEMAN A. YOUNG MUNI ASOS  
**124.875**

SELFREDGE APP CON ★  
**119.6 395.9**

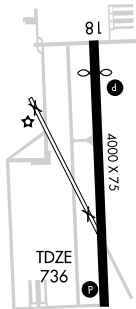
GCO  
**121.725**

UNICOM  
**122.8 (CTAF)**

MISSED APCH FIX

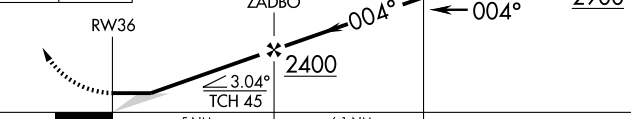


ELEV 739



MIRL Rwy 18-36  
REL Rws 18 and 36

2900 UTEBE VGS1 and descent angles not coincident. 4 NM Holding Pattern



CATEGORY	A	B	C	D
LNAV MDA	1200-1	464 (500-1)	1200-1½ 464 (500-1½)	1200-1½ 464 (500-1½)
CIRCLING	1280-1	541 (600-1)	1280-1½ 541 (600-1½)	1420-2¼ 681 (700-2¼)

(SPRTN.SPRTN3) 10210

ST-118 (FAA)

## SPRTN THREE ARRIVAL

DETROIT, MICHIGAN

DETROIT APP CON

127.5 239.275

WILLOW RUN ATIS 127.425

PONTIAC ATIS 125.025

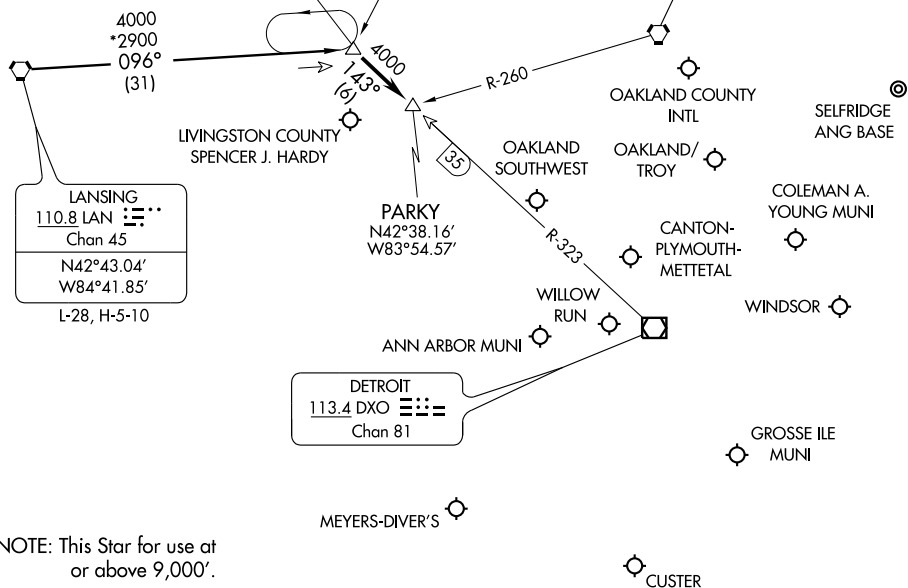
COLEMAN A. YOUNG ATIS 124.875

WINDSOR ATIS 134.5

SELFREDGE ATIS 125.325 270.1

SPRTN

N42°42.52'-W84°00.23'

VERTICAL NAVIGATION  
PLANNING INFORMATIONTURBOJETS/TURBOPROPS:  
Expect clearance to cross at  
9000'.NOTE: This Star for use at  
or above 9,000'.

NOTE: Chart not to scale.

EC-1, 23 SEP 2010 to 21 OCT 2010

LANSING TRANSITION (LAN.SPRTN3): From over LAN VORTAC via LAN R-096  
to SPRTN INT. Thence . . . .. . . . Aircraft landing: DET, PTK, VLL, D98, MTC, ARB, YIP, ONZ,  
1D2, TTF, Y47, 36MI, OZW, 3TE, YQG: From over SPRTN INT via DXO R-323  
to PARKY INT. Thence . . . .

. . . . Expect radar vectors to final approach course.

## SPRTN THREE ARRIVAL

DETROIT, MICHIGAN

(SPRTN.SPRTN3) 10210

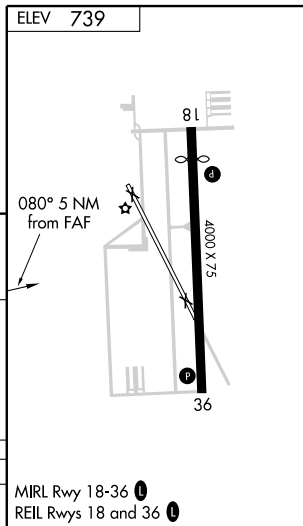
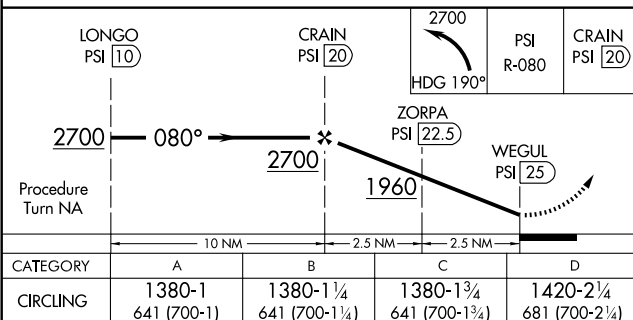
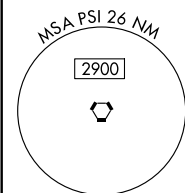
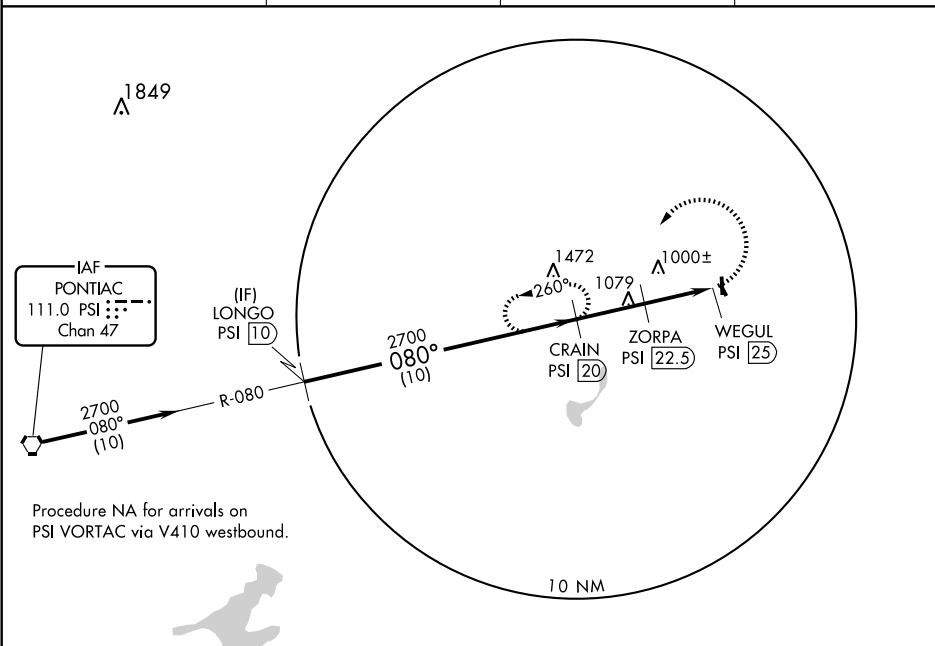
VORTAC PSI <b>111.0</b> Chan <b>47</b>	APP CRS <b>080°</b>	Rwy Idg TDZE Apt Elev	<b>N/A</b> <b>N/A</b> <b>739</b>
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**VOR/DME-A**  
ROMEO STATE (D98)

**V** Use Coleman A. Young Muni altimeter setting, if not received  
**NA** use Pontiac altimeter setting and increase all MDA 20 feet.

**MISSED APPROACH:** Climbing left turn to 2700  
via heading 190° and PSI VORTAC R-080 to  
CRAIN/20 DME and hold.

COLEMAN A. YOUNG MUNI ASOS <b>124.875</b>	SELFREDGE APP CON ★ <b>119.6 395.9</b>	GCO <b>121.725</b>	UNICOM <b>122.8</b> (CTAF) <b>0</b>
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**SAGINAW CO H.W. BROWNE** (HYX) 4 E UTC-5(-4DT) N43°26.01' W83°51.74'

DETROIT

601 B S4 FUEL 100LL, JET A NOTAM FILE HYX

H-106, 11A, L-28J

RWY 09-27: H5000X100 (ASPH) S-60, D-72, 2D-101 MIRL

IAP

RWY 09: REIL. PAPI(P2L)—GA 3.0° TCH 30'. P-line.

RWY 27: MALSR. PAPI(P2L)—GA 3.0° TCH 30'.

RWY 05-23: H2951X60 (ASPH) S-12.5 MIRL

RWY 05: PAPI(P2L)—GA 3.0° TCH 25'. Thld dsplcd 120'. Fence.

RWY 23: PAPI(P2R)—GA 3.0° TCH 25'. Thld dsplcd 130'. Road.

**AIRPORT REMARKS:** Attended Mon-Fri 1230-2300Z†, Sat-Sun

1300-2030Z†. Arpt unattended holidays. 24 hr self serve fuel.

Parachute Jumping. Birds on and invof arpt. Rwy 23 has 2' high concrete culvert, 120' left, 20' from rwy end and ditch 15' deep across the apch end, 120' left to 21' right, 20' to 197' from rwy end. Rwy 05-23 sfc numerous transverse and longitudinal cracks.

ACTIVATE MALSR Rwy 27, MIRL Rwy 05-23 and Rwy 09-27, REIL

Rwy 09 and PAPI Rwy 05, Rwy 23, Rwy 09 and Rwy 27—CTAF.

**WEATHER DATA SOURCES:** AWOS-3 118.325 (989) 752-3408. HIWAS 112.9 MBS.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

SAGINAW RCO 122.4 122.2 (LANSING RADIO)

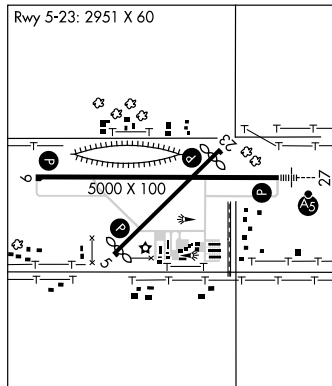
Ⓡ SAGINAW APP/DEP CON 120.95 (1100-0400Z†)

CLEVELAND CENTER APP/DEP CON 127.7 (0400-1100Z†)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE MBS.

SAGINAW (L) VORW/DME 112.9 MBS Chan 76 N43°31.90' W84°04.64' 125° 11.1 NM to fld. 663/3W. HIWAS.

ILS/DME 111.35 I-HQW Chan 50(Y) Rwy 27.



## ST CLAIR

**DAVID'S LANDING** (5Y5) 3 SW UTC-5(-4DT) N42°47.87' W82°32.19'

DETROIT

615 NOTAM FILE LAN

RWY 18-36: 2500X100 (TURF)

RWY 18: Thld dsplcd 1100'. P-line. RWY 36: Trees.

**AIRPORT REMARKS:** Attended irregularly. Arpt CLOSED Dec-Mar and when snow covered. 100' p-line 5/8 mile S of Rwy 36. Rwy 18-36 soft in spring. Rwy 18-36 -4' ditch 10' W of Rwy. Rwy 18-36 and dsplcd thld marked with 3' yellow cones.

**COMMUNICATIONS:** CTAF 122.9

**ST CLAIR CO INTL** (See PORT HURON)

**ST HELEN** (6Y6) 1SE UTC-5(-4DT) N44°22.00' W84°24.00'

LAKE HURON

1198 NOTAM FILE LAN

RWY 12-30: 2600X120 (TURF)

RWY 12: Thld dsplcd 830'. Trees.

RWY 30: Thld dsplcd 800'. Trees.

RWY 18-36: 2600X110 (TURF)

RWY 18: Thld dsplcd 825'. Trees.

RWY 36: Thld dsplcd 620'. Road.

**AIRPORT REMARKS:** Unattended. CLOSED Dec thru Mar and when snow covered. Hangars located 135' west of centerline Rwy 18-36. Rwy 12-30 and Rwy 18-36 dsplcd thlds marked with cones.

**COMMUNICATIONS:** CTAF 122.9

LOC/DME I-HQW  
**111.35**  
 Chan **50 (Y)**

APP CRS  
**274°**

Rwy Idg  
**5000**

TDZE  
**600**

Apt Elev  
**601**

# ILS or LOC/DME RWY 27

SAGINAW COUNTY H. W. BROWNE (HYX)

When local altimeter setting not received, use Saginaw MBS  
 Intl altimeter setting and increase all DA 36 feet, increase all  
 MDA 40 feet. VDP NA when using MBS Intl altimeter setting.



MISSED APPROACH: Climb to 1200 then climbing  
 right turn to 4000 direct MBS VOR/DME and hold,  
 continue climb-in-hold to 4000.

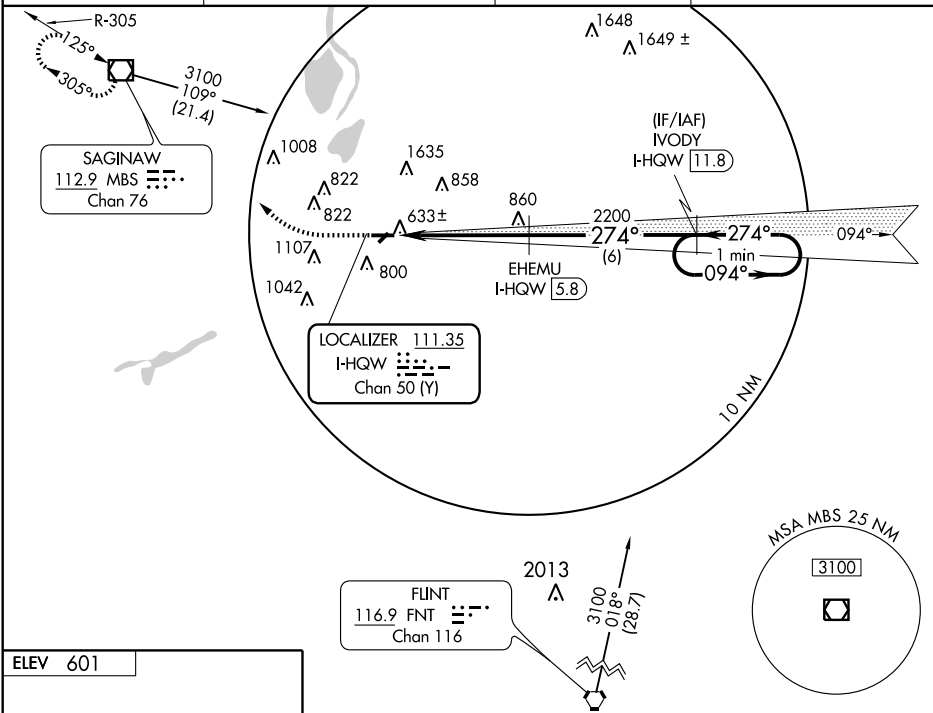
AWOS-3  
**118.325**

SAGINAW APP CON \*

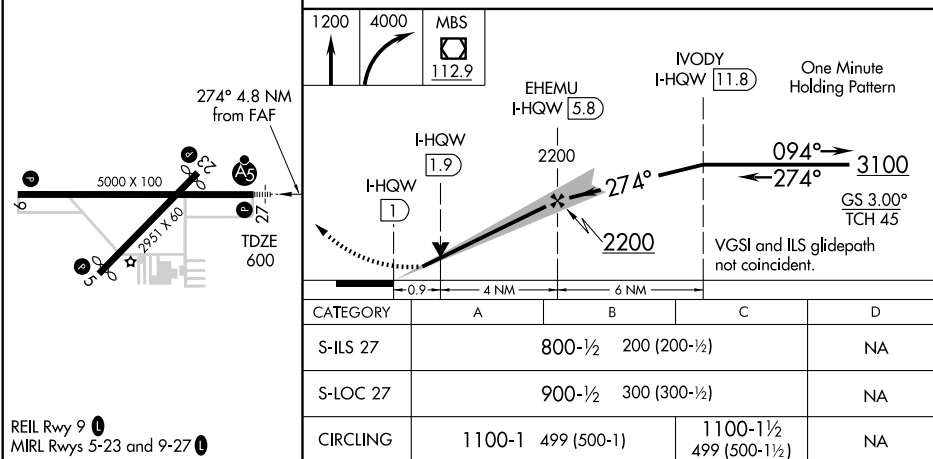
**120.95 235.625**

GCO  
**121.725**

UNICOM  
**122.8 (CTAF)**



ELEV 601



REIL Rwy 9  
 MRL Rwy 5-23 and 9-27

SAGINAW, MICHIGAN

Orig-A 10098

SAGINAW COUNTY H. W. BROWNE (HYX)

43°26'N - 83°52'W

# ILS or LOC/DME RWY 27

WAAS CH <b>50200</b> <b>W09A</b>	APP CRS <b>094°</b>	Rwy Idg TDZE Apt Elev	<b>5000</b> <b>600</b> <b>601</b>
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# RNAV (GPS) RWY 9

SAGINAW COUNTY H. W. BROWNE (HYX)

**▼**  
**▲** Circling to Rwy 5 NA at night. When local altimeter setting not received, use Saginaw MBS Intl altimeter setting and increase all DA 36 feet, increase LPV and LNAV/VNAV all Cals visibility  $\frac{1}{4}$  mile, increase all MDA 40 feet, increase LNAV visibility Cat C  $\frac{1}{4}$  mile and Circling visibility Cat C  $\frac{1}{4}$  mile. VDP and Baro-VNAV NA when using Saginaw MBS Intl altimeter setting. For uncompensated Baro-VNAV system, procedure NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA.

**MISSED APPROACH:**  
Climb to 2700 direct  
IVODY and hold.

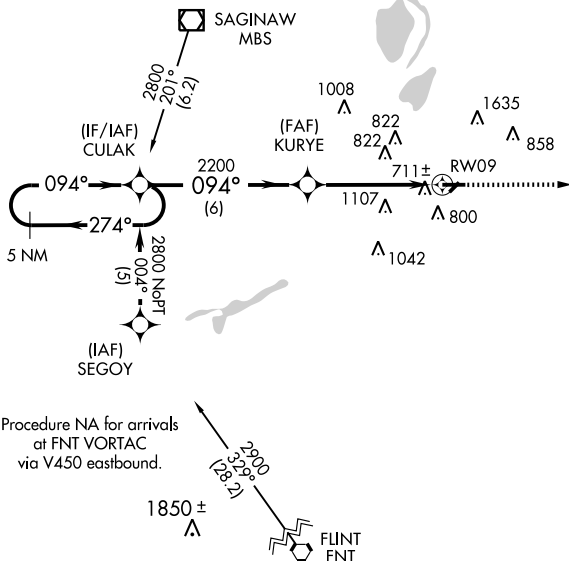
AWOS-3  
**118.325**

SAGINAW APP CON ★  
**120.95 235.625**

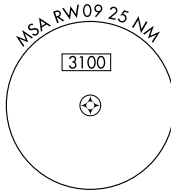
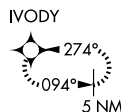
GCO  
**121.725**

UNICOM  
**122.8 (CTAF) ①**

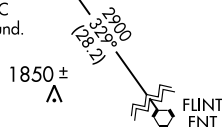
Procedure NA for arrivals  
at MBS VOR/DME  
on airway radials 163 CW 259.



1648  
▲ 1649 ±



Procedure NA for arrivals  
at FNT VORTAC  
via V450 eastbound.



5 NM  
Holding Pattern

CULAK

KURYE

2700

IVODY

2800  
GS 3.00°  
TCH 45°

VGSI and RNAV glidepath  
not coincident.

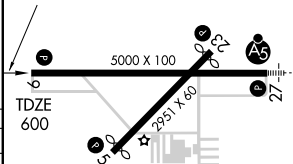
2200

\*LNAV only

\*2.4 NM  
to RW09

RW09

094° to  
RW09



CATEGORY	A	B	C	D
LPV DA	850- $\frac{3}{4}$	250 (300- $\frac{3}{4}$ )		NA
LNAV/VNAV DA	1095-1 $\frac{3}{4}$	495 (500-1 $\frac{3}{4}$ )		NA
LNAV MDA	1380-1 780 (800-1)	1380-1 $\frac{1}{4}$ 780 (800-1 $\frac{1}{4}$ )	1380-2 $\frac{1}{4}$ 780 (800-2 $\frac{1}{4}$ )	NA
CIRCLING	1380-1 779 (800-1)	1380-1 $\frac{1}{4}$ 779 (800-1 $\frac{1}{4}$ )	1380-2 $\frac{1}{4}$ 779 (800-2 $\frac{1}{4}$ )	NA

REIL Rwy 9 ①  
MIRL Rwy 5-23 and 9-27 ①

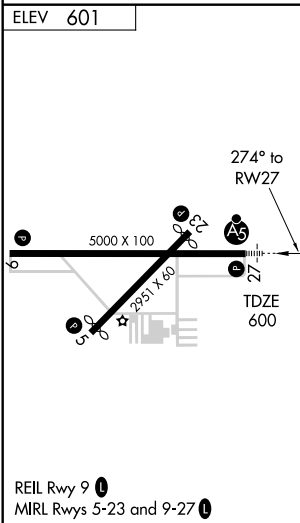
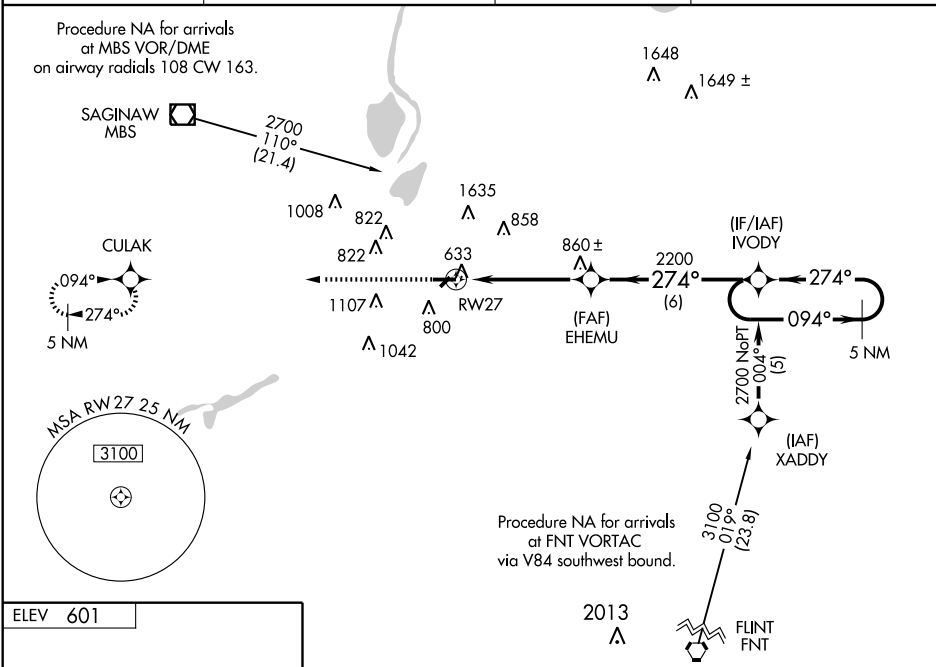
## RNAV (GPS) RWY 27

SAGINAW COUNTY H. W. BROWNE (HYX)

WAAS CH <b>90200</b> <b>W27A</b>	APP CRS <b>274°</b>	Rwy Idg TDZE Apt Elev	<b>5000</b> <b>600</b> <b>601</b>
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<p>When local altimeter setting not received, use Saginaw MBS Intl altimeter setting and increase all DA 36 feet. Increase LNAV/VNAV all Cats visibility <math>\frac{1}{4}</math>, increase all MDA 40 feet. Baro-VNAV and VDP NA when using Saginaw MBS Intl altimeter setting.</p> <p>For uncompensated Baro-VNAV system. Procedure NA below -16°C (4°F) or above 54°C (130°F). For inoperative MALSRS increase LPV visibility to 1 all Cats. DME/DME RNP-0.3 NA.</p>	<p>MALSRS</p>	<p>MISSED APPROACH: Climb to 2800 direct CULAK and hold.</p>
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AWOS-3 <b>118.325</b>	SAGINAW APP CON * <b>120.95 235.625</b>	GCO <b>121.725</b>	UNICOM <b>122.8 (CTAF) 0</b>
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2800		CULAK		5 NM Holding Pattern	
274° to RW27		EHEMU		IVODY	
*1.3 NM to RW27		*LNAV only		094° → 2700	
RW27		2200		← 274°	
1.3		3.5 NM		GS 3.00° TCH 45	
6 NM				VGSI and RNAV glidepath not coincident.	
CATEGORY	A	B	C	D	
LPV DA	850- $\frac{1}{2}$		250 (300- $\frac{1}{2}$ )	NA	
LNAV/VNAV DA	903- $\frac{1}{2}$		303 (400- $\frac{1}{2}$ )	NA	
LNAV MDA	1040- $\frac{1}{2}$		440 (500- $\frac{1}{2}$ )	1040- $\frac{3}{4}$ 440 (500- $\frac{3}{4}$ )	NA
CIRCLING	1100-1		499 (500-1)	1100-1 $\frac{1}{2}$ 499 (500-1 $\frac{1}{2}$ )	NA





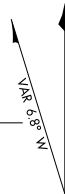
## AIRPORT DIAGRAM

AL-648 (FAA)

SAGINAW / MBS INTL (MBS)  
SAGINAW, MICHIGAN

ATIS  
125.925  
SAGINAW TOWER ★  
120.1 257.7  
GND CON  
121.7  
CLNC DEL  
121.85  
D

43°32.5'N



JANUARY 2010  
ANNUAL RATE OF CHANGE  
0.0° W

FIELD  
ELEV  
668

ELEV  
650

DRAG STRIP

TERMINAL

FIRE STATION

FBO

GENERAL  
AVIATION  
PARKING

ELEV  
665

TWR  
741

ELEV  
659

RWY 05-23,  
S-135, D-160, 2S-175, 2D-265  
RWY 14-32  
S-135, D-160, 2S-175, 2D-265

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.  
REDBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

84°05.5'W

84°05.0'W

84°04.5'W

84°04.0'W

## AIRPORT DIAGRAM

SAGINAW, MICHIGAN  
SAGINAW / MBS INTL (MBS)

## SAGINAW

**MBS INTL** (MBS) 9 NW UTC-5(-4DT) N43°31.98' W84°04.78'

668 B S2 FUEL 100LL, JET A OX 1, 3 LRA ARFF Index—See Remarks  
NOTAM FILE MBS

**RWY 05-23:** H8002X150 (ASPH-GRVD) S-135, D-160, 2S-175, 2D-265 HIRL

**RWY 05:** MALSR.

**RWY 23:** MALSR. PAPI(P4L)—GA 3.0° TCH 54'. 0.3% up.

**RWY 14-32:** H6399X150 (ASPH-GRVD) S-135, D-160, 2S-175,  
2D-265 HIRL

**RWY 14:** REIL. VASI(V4L)—GA 3.0° TCH 42'. Trees.

**RWY 32:** REIL. PAPI(P4L)—GA 3.0° TCH 50'. Trees.

**RUNWAY DECLARED DISTANCE INFORMATION**

**RWY 05:** TORA-8002 TODA-8002 ASDA-8002 LDA-8002

**RWY 14:** TORA-6399 TODA-6399 ASDA-6399 LDA-6399

**RWY 23:** TORA-8002 TODA-8002 ASDA-8002 LDA-8002

**RWY 32:** TORA-6399 TODA-6399 ASDA-6399 LDA-6399

**AIRPORT REMARKS:** Attended continuously. For svc after hrs call 989-695-2554. Birds on and in/ov arpt. When twr clsd HIRL Rwy 05-23 and 14-32 are preset med ints. Twy B is a one way only twy from the rwy to the ramp. ACTIVATE MALSR Rwy 05 and 23—CTAF. Class I, ARFF Index B. Index C ARFF svc available upon req. Ldg fee. Ldg fee waived in lieu of fuel purchase.

**WEATHER DATA SOURCES:** ASOS (989) 695-2488. HIWAS 112.9 MBS.

LAWRS (1100-0400Z†)

**COMMUNICATIONS:** CTAF 120.1 ATIS 125.925 UNICOM 122.95

SAGINAW RCO 122.4 122.2 (LANSING RADIO)

Ⓡ SAGINAW APP/DEP CON 126.45 (230°-049°), 120.95 (050°-229°)(1100-0400Z†).

CLEVELAND CENTER APP/DEP CON 127.7 (0400-1100Z†).

SAGINAW TOWER 120.1 (1100-0400Z†) GND CON 121.7

CLNC DEL 121.85

**AIRSPACE:** CLASS D svc 1100-0400Z† other times CLASS E.

TRSA svc ctc APP CON within 20 NM.

**RADIO AIDS TO NAVIGATION:** NOTAM FILE MBS.

SAGINAW (L) VORW/DME 112.9 MBS Chan 76 N43°31.90' W84°04.64' at fld. 663/3W. HIWAS.

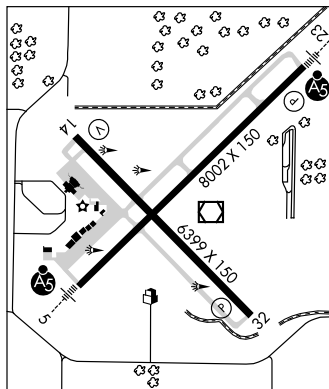
OLSTE NDB (LOM) 257 MB N43°27.69' W84°10.79' 050° 6.1 NM to fld. Unmonitored.

ILS 108.7 I-MBS Rwy 05. Class IE. LOM OLSTE NDB. ILS unmonitored when twr clsd.

ILS 108.7 I-TQR Rwy 23. Class ID. ILS unmonitored when twr clsd.

ASR (1600-0900Z†)

**COMM/NAV/WEATHER REMARKS:** Emerg frequency, 121.5 not available at twr. OLSTE NDB unusable by 10 NM and between 150°-180°.



LOC I-MBS <b>108.7</b>	APP CRS <b>050°</b>	Rwy Idg TDZE Apt Elev	<b>8002</b> <b>666</b> <b>668</b>
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## ILS or LOC RWY 5

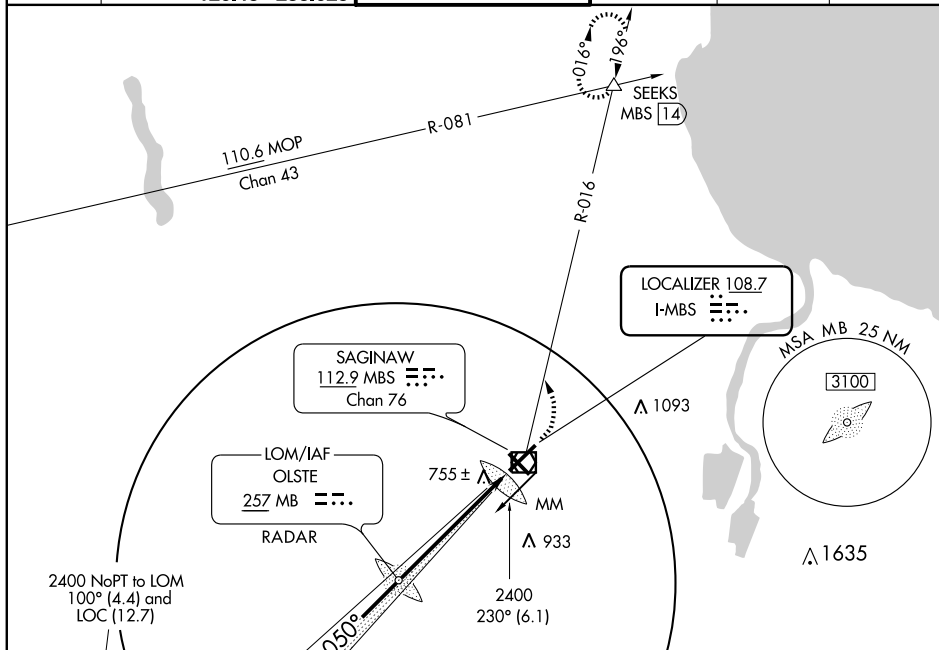
SAGINAW/MBS INTL (MBS)

**ASR** CAT D S-LOC visibility increased to RVR 5000 for inoperative MM. When control tower closed, activate MALSR Rwy 23 and SSALR Rwy 5 - CTAF.  
\*RVR 1800 authorized with the use of FD or AP or HUD to DA.

MALSR

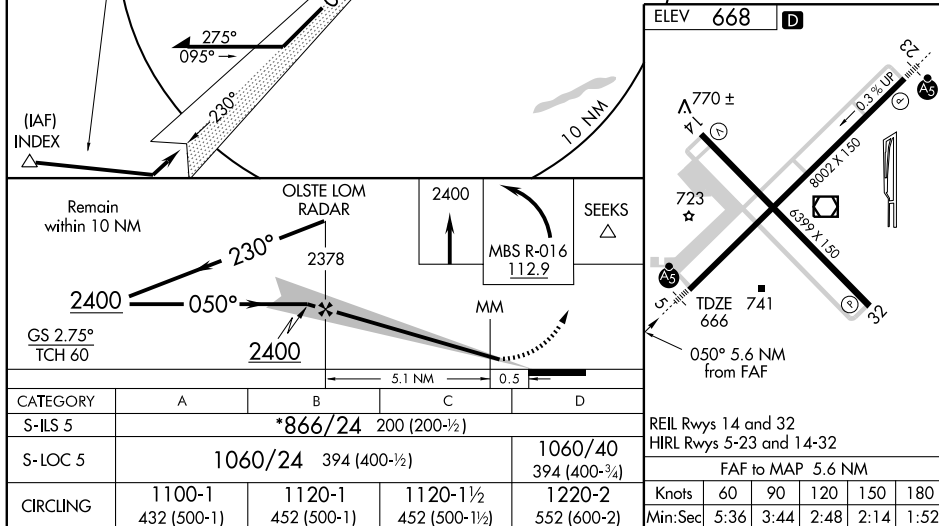
**MISSED APPROACH:** Climb to 2400 then left turn via MBS R-016 to SEEKS Int/14 DME and hold.

ATIS <b>125.925</b>	SAGINAW APP CON ★ 050°-229° <b>120.95 235.625</b> 230°-049° <b>126.45 235.625</b>	SAGINAW TOWER ★ <b>120.1 (CTAF) 0 257.7</b>	GND CON <b>121.7</b>	CLNC DEL <b>121.85</b>	UNICOM <b>122.95</b>
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EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1. 23 SEP 2010 to 21 OCT 2010



SAGINAW, MICHIGAN

Amdt 10A 10266

SAGINAW/MBS INTL (MBS)

ILS or LOC RWY 5

43°32'N - 84°05'W

LOC I-TQR <b>108.7</b>	APP CRS <b>230°</b>	Rwy Idg TDZE Apt Elev	<b>8002</b> <b>661</b> <b>668</b>
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# ILS or LOC RWY 23

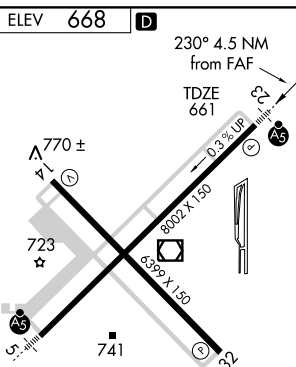
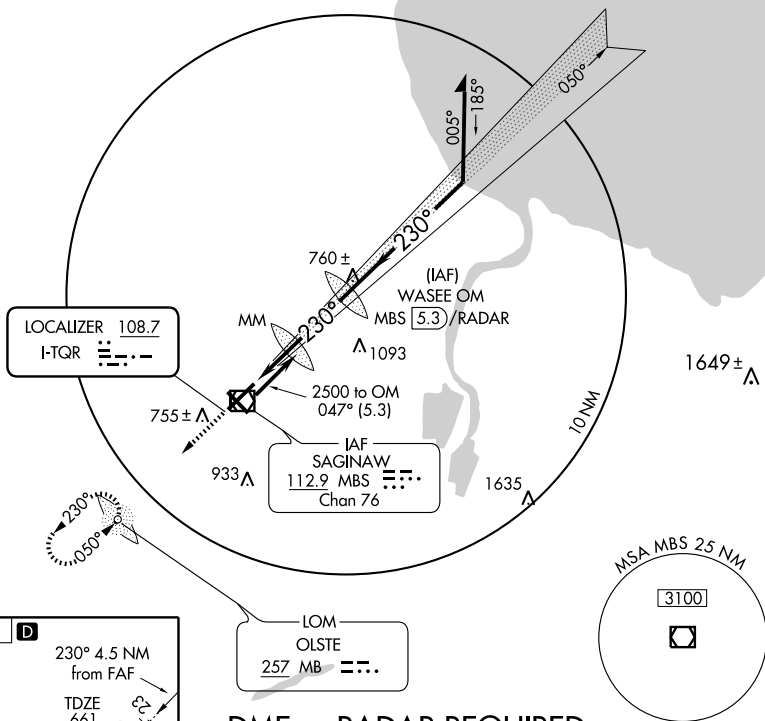
SAGINAW/MBS INTL (MBS)

**V** \*RVR 1800 authorized with the use of FD or AP or HUD to DA.  
**ADF REQUIRED.**  
**ASR**



MISSED APPROACH: Climb to 2500  
direct OLSTE LOM and hold.

ATIS <b>125.925</b>	SAGINAW APP CON ★ 050°-229° <b>120.95 235.625</b> 230°-049° <b>126.45 235.625</b>	SAGINAW TOWER ★ <b>120.1</b> (CTAF) <b>257.7</b>	GND CON <b>121.7</b>	CLNC DEL <b>121.85</b>	UNICOM <b>122.95</b>
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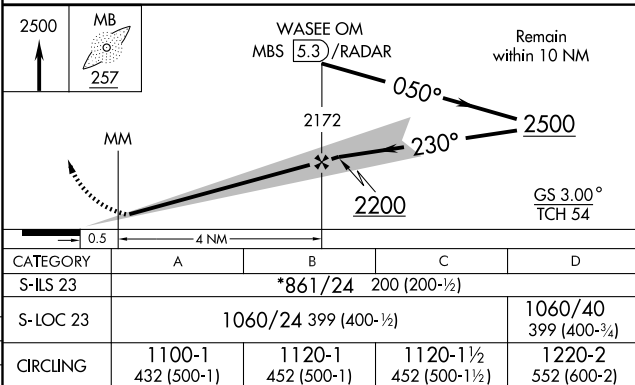


REIL Rwy 14 and 32

HIRL Rwy 5-23 and 14-32

FAF to MAP 4.5 NM

Knots	60	90	120	150	180
Min:Sec	4:30	3:00	2:15	1:48	1:30



SAGINAW, MICHIGAN

Amdt 4B 08APR10

43°32'N - 84°05'W

# ILS or LOC RWY 23

WAAS CH <b>82010</b> <b>W05A</b>	APP CRS <b>050°</b>	Rwy Idg TDZE Apt Elev	<b>8002</b> <b>666</b> <b>668</b>
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## RNAV (GPS) RWY 5

SAGINAW/ MBS INTL (MBS)

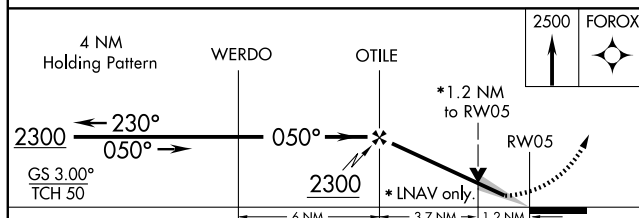
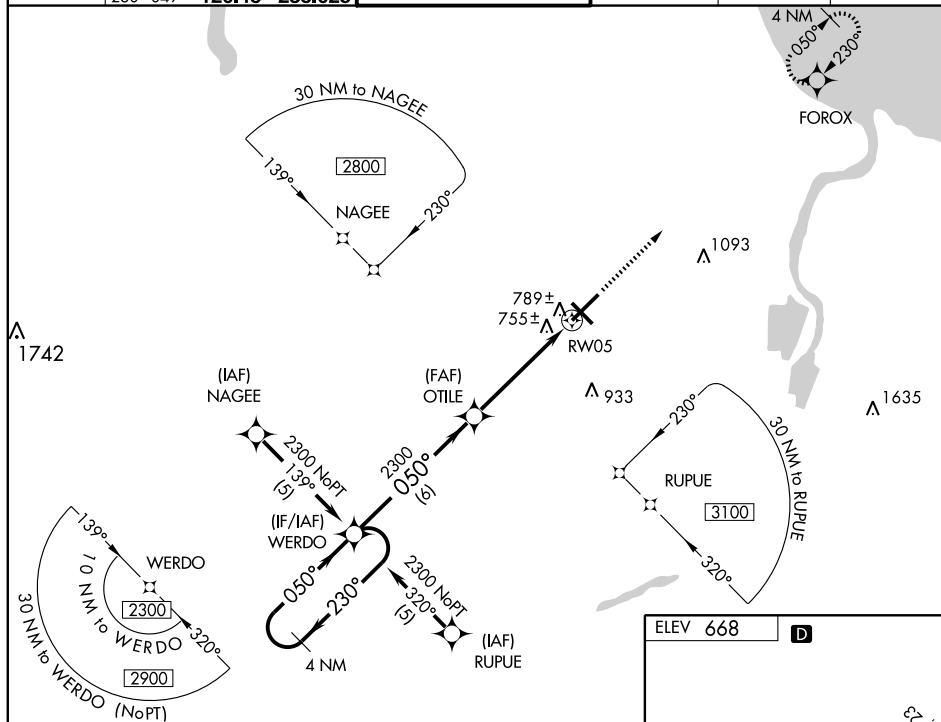
▼ When local altimeter setting not received, use Saginaw County H. W. Browne altimeter setting and increase all DA 36 feet and all MDA 40 feet, increase LNAV/VNAV all Cats visibility to RVR 5000. For unoperative MALSR, increase LNAV Cat D visibility to RVR 6000. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. Baro-VNAV and VDP NA when using Saginaw County H. W. Browne altimeter setting.

MALSR

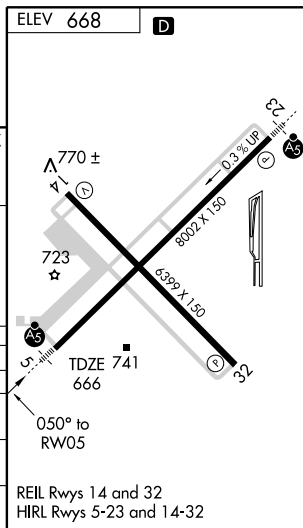


MISSED APPROACH:  
Climb to 2500 direct  
FOROX and hold.

ATIS <b>125.925</b>	SAGINAW APP CON★ 050°-229° <b>120.95</b> 230°-049° <b>126.45</b>	235.625 235.625	SAGINAW TOWER ★ <b>120.1</b> (CTAF) <b>0 257.7</b>	GND CON <b>121.7</b>	CLNC DEL <b>121.85</b>	UNICOM <b>122.95</b>
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CATEGORY	A	B	C	D
LPV DA	866/24		200 (200-1/2)	
LNAV/VNAV DA	1059/40		393 (400-3/4)	
LNAV MDA	1080/24	414 (500-1/2)	1080/40	1080/50
			414 (500-3/4)	414 (500-1)
CIRCLING	1100-1	1120-1	1120-1 1/2	1220-2
	432 (500-1)	452 (500-1)	452 (500-1 1/2)	552 (600-2)



SAGINAW, MICHIGAN

Amdt 1 10266

43°32'N - 84°05'W

SAGINAW/ MBS INTL (MBS)

RNAV (GPS) RWY 5

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010

WAAS CH <b>69211</b> <b>W14A</b>	APP CRS <b>140°</b>	Rwy Idg TDZE Apt Elev <b>6399</b> <b>668</b> <b>668</b>
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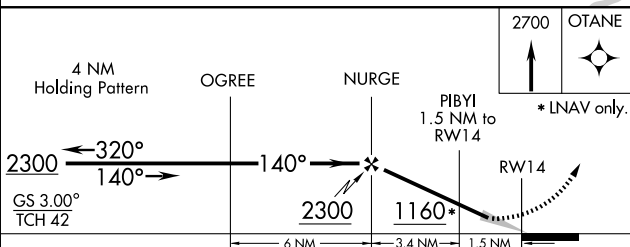
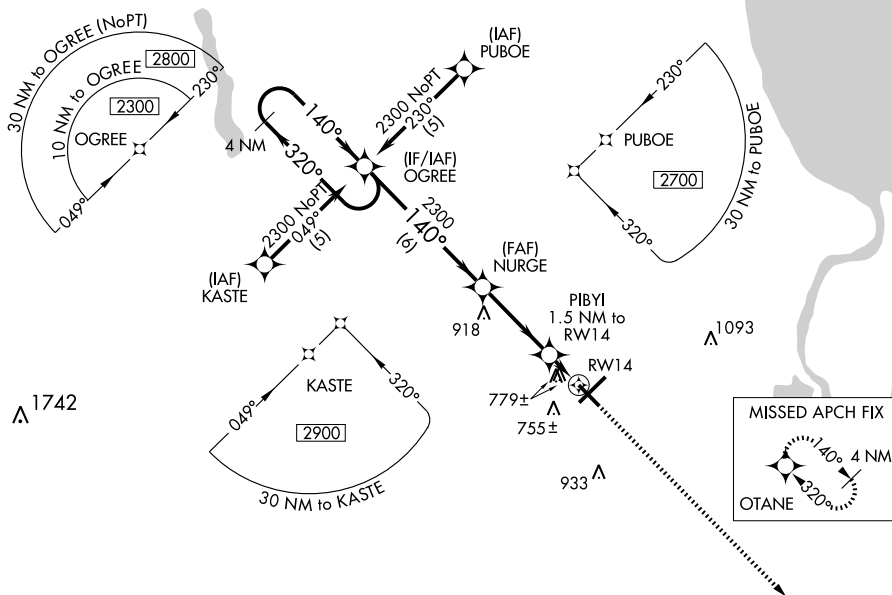
**RNAV (GPS) RWY 14**

SAGINAW/ MBS INTL (MBS)

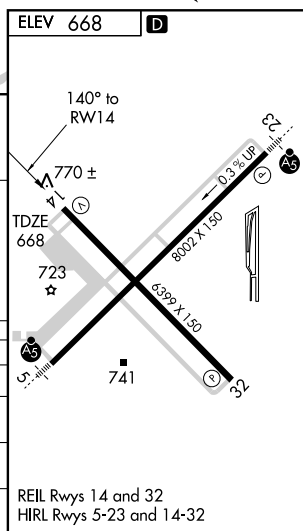
**▼** Baro-VNAV NA when using Saginaw County H. W. Browne altimeter setting.  
**▲** For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). When local altimeter setting not received, use Saginaw County H. W. Browne altimeter setting and increase all DA 36 feet and all MDA 40 feet, increase LNAV Cat. C visibility ¼ mile. DME/DME RNP -0.3 NA.

**MISSED APPROACH:** Climb to 2700 direct OTANE and hold.

ATIS <b>125.925</b>	SAGINAW APP CON ★ 050°-229° <b>120.95</b> <b>235.625</b> 230°-049° <b>126.45</b> <b>235.625</b>	SAGINAW TOWER ★ <b>120.1</b> (CTAF) <b>257.7</b>	GND CON <b>121.7</b>	CLNC DEL <b>121.85</b>	UNICOM <b>122.95</b>
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CATEGORY	A	B	C	D
LPV DA	1004-1¼ 336 (400-1¼)			
LNAV/VNAV DA	1079-1½ 411 (500-1½)			
LNAV MDA	1040-1 372 (400-1)			1040-1¼ 372 (400-1¼)
CIRCLING	1100-1 432 (500-1)	1120-1 452 (500-1)	1120-1½ 452 (500-1½)	1220-2 552 (600-2)



WAAS CH <b>49010</b> <b>W23A</b>	APP CRS <b>230°</b>	Rwy Idg TDZE Apt Elev	<b>8002</b> <b>661</b> <b>668</b>
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## RNAV (GPS) RWY 23

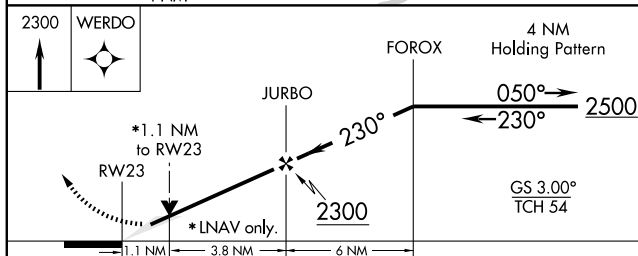
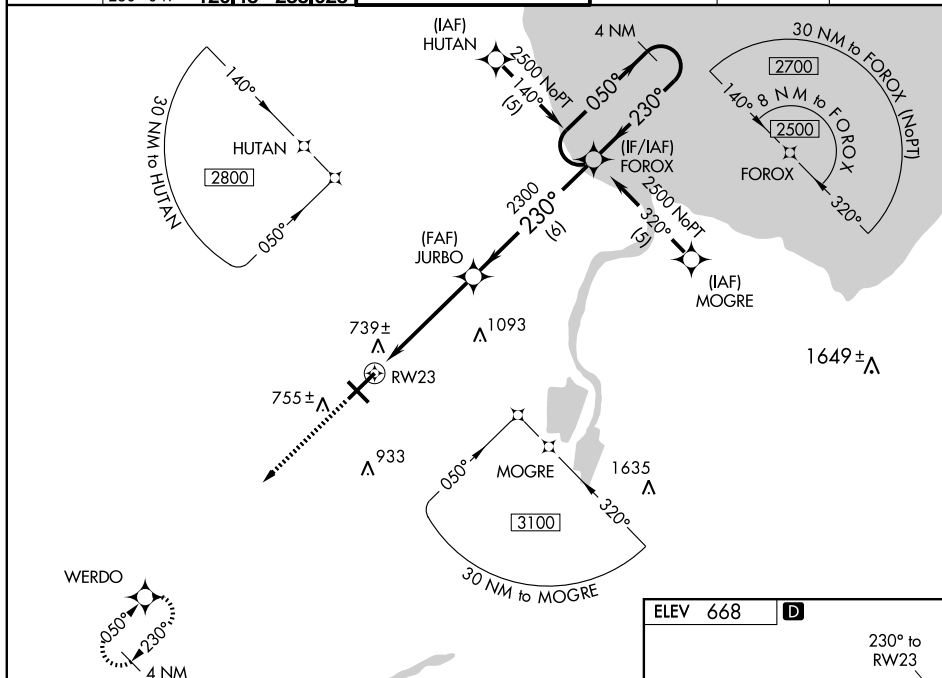
SAGINAW/ MBS INTL (MBS)

**⚠** When local altimeter setting not received, use Saginaw County H. W. Browne altimeter setting and increase all DA 36 feet and all MDA 40 feet, increase LNAV/VNAV all Cats visibility  $\frac{1}{4}$  mile, LNAV Cat C visibility  $\frac{1}{4}$  mile. Baro-VNAV and VDP NA when using ASR Saginaw County H. W. Browne altimeter setting. For inoperative MALSR, increase LNAV Cat D visibility to  $1\frac{1}{4}$ . For uncompensated Baro-VNAV systems, LNAV/VNAV NA below  $-16^{\circ}\text{C}$  ( $4^{\circ}\text{F}$ ) or above  $47^{\circ}\text{C}$  ( $116^{\circ}\text{F}$ ). DME/DME RNP-0.3 NA.

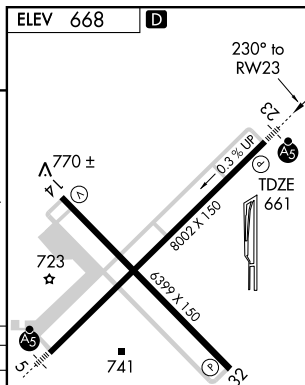


**MISSED APPROACH:**  
Climb to 2300 direct  
WERDO and hold.

ATIS <b>125.925</b>	SAGINAW APP CON★ 050°-229° <b>120.95</b> <b>235.625</b> 230°-049° <b>126.45</b> <b>235.625</b>	SAGINAW TOWER ★ <b>120.1</b> (CTAF) <b>257.7</b>	GND CON <b>121.7</b>	CLNC DEL <b>121.85</b>	UNICOM <b>122.95</b>
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CATEGORY	A	B	C	D
LPV DA	861- $\frac{1}{2}$ 200 (200- $\frac{1}{2}$ )			
LNAV/VNAV DA	1034- $\frac{3}{4}$ 373 (400- $\frac{3}{4}$ )			
LNAV MDA	1060- $\frac{1}{2}$ 399 (400- $\frac{1}{2}$ )			1060-1 399 (400-1)
CIRCLING	1100-1 432 (500-1)	1120-1 452 (500-1)	1120-1 $\frac{1}{2}$ 452 (500-1 $\frac{1}{2}$ )	1220-2 552 (600-2)



REIL Rwy 14 and 32  
HIRL Rwy 5-23 and 14-32

WAAS CH <b>78011</b> <b>W32A</b>	APP CRS <b>320°</b>	Rwy Idg TDZE Apt Elev	<b>6399</b> <b>665</b> <b>668</b>
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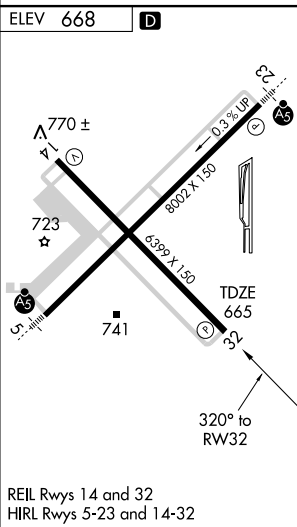
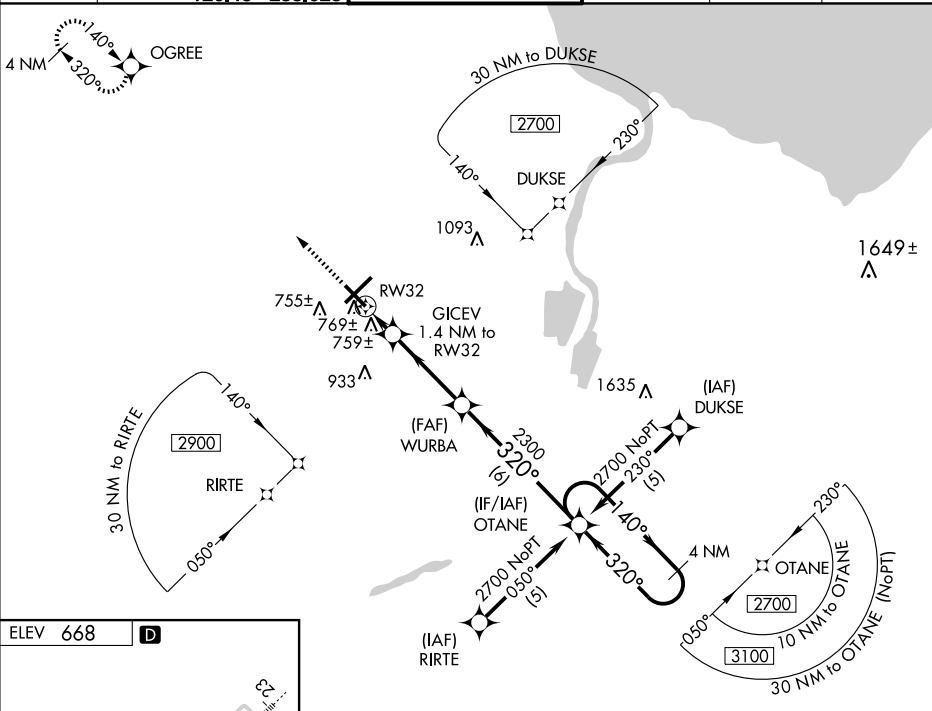
## RNAV (GPS) RWY 32

SAGINAW/ MBS INTL (MBS)

**▼** Baro-Vnav NA when using Saginaw County H. W. Browne altimeter setting. For uncompensated Baro-Vnav systems, LNAV/VNAV NA below -16°C (4°F) or above 47° (116°F). When local altimeter setting not received, use Saginaw County H. W. Browne altimeter setting and increase all DA 36 feet and all MDA 40 feet, increase LPV all Cats. visibility and LNAV Cat. C visibility ¼ mile. DME/DME RNP- 0.3 NA.

**MISSED APPROACH:** Climb to 2300 direct OGREE and hold.

ATIS <b>125.925</b>	SAGINAW APP CON ★ 050°-229° <b>120.95 235.625</b> 230°-049° <b>126.45 235.625</b>	SAGINAW TOWER ★ <b>120.1</b> (CTAF) <b>257.7</b>	GND CON <b>121.7</b>	CLNC DEL <b>121.85</b>	UNICOM <b>122.95</b>
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ELEV 668 <b>D</b>		OGREE		OTANE		4 NM Holding Pattern	
* LNAV only.		GICEV 1.4 NM to RW32		WURBA		140° → 2700	
RW32		1140*		2300		GS 3.00° TCH 50	
CATEGORY		A		B		C	
LPV DA		964-1		299 (300-1)			
LNAV/VNAV DA		1057-1½		392 (400-1½)			
LNAV MDA		1040-1		375 (400-1)		1040-1¼ 375 (400-1¼)	
CIRCLING		1100-1 432 (500-1)		1120-1 452 (500-1)		1120-1½ 452 (500-1½)	
						1220-2 552 (600-2)	



VOR/DME MBS <b>112.9</b> Chan <b>76</b>	APP CRS <b>057°</b>	Rwy Idg TDZE <b>666</b> Apt Elev <b>668</b>
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# VOR RWY 5

SAGINAW/MBS INTL (MBS)

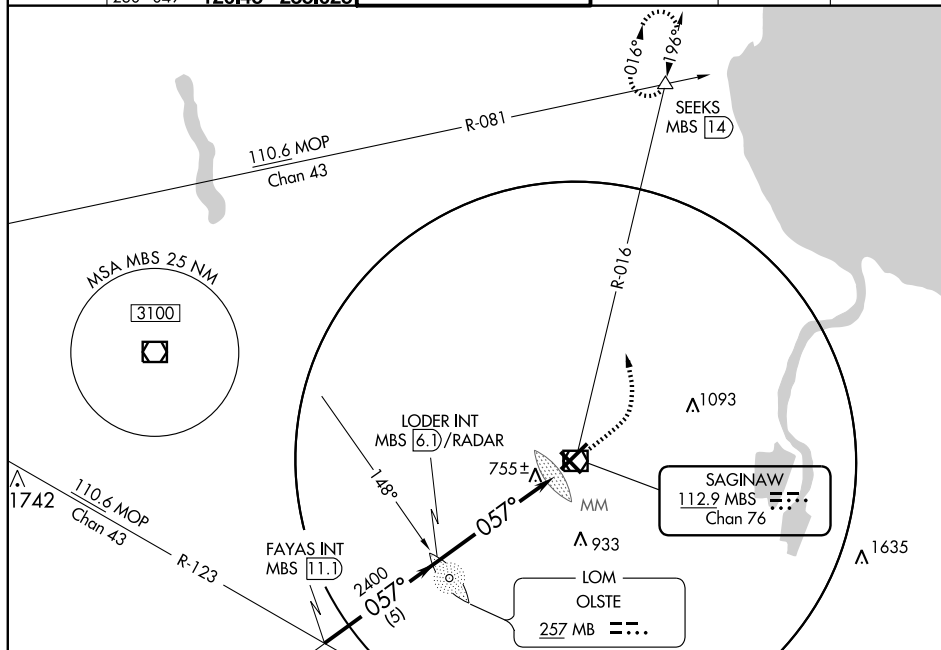


Category D S-5 visibility increased to RVR 6000 for inoperative SSALR.

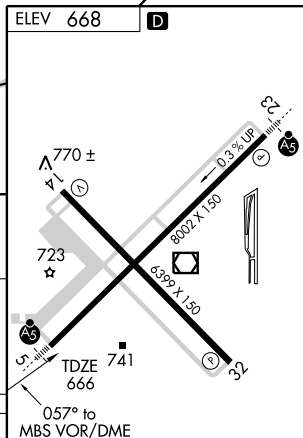
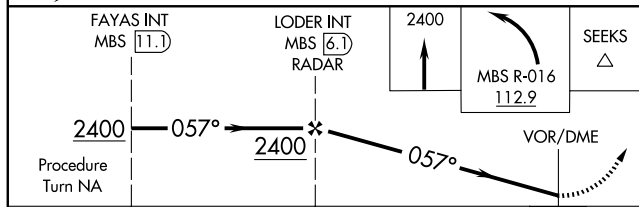


MISSED APPROACH: Climb to 2400 then left turn via MBS R-016 to Seeks Int/14 DME and hold.

ATIS <b>125.925</b>	SAGINAW APP CON★ 050°-229° <b>120.95 235.625</b> 230°-049° <b>126.45 235.625</b>	SAGINAW TOWER★ <b>120.1</b> (CTAF) <b>257.7</b>	GND CON <b>121.7</b>	CLNC DEL <b>121.85</b>	UNICOM <b>122.95</b>
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## DME, ADF or RADAR REQUIRED



CATEGORY	A	B	C	D
S-5	1060/24 394 (400-½)			1060/50 394 (400-1)
CIRCLING	1100-1 432 (500-1)	1120-1 452 (500-1)	1120-1 ½ 452 (500-1 ½)	1220-2 552 (600-2)

REIL Rwy 14 and 32  
HIRL Rwy 5-23 and 14-32

VOR/DME MBS <b>112.9</b> Chan <b>76</b>	APP CRS <b>131°</b>	Rwy Idg TDZE <b>668</b> Apt Elev <b>668</b>
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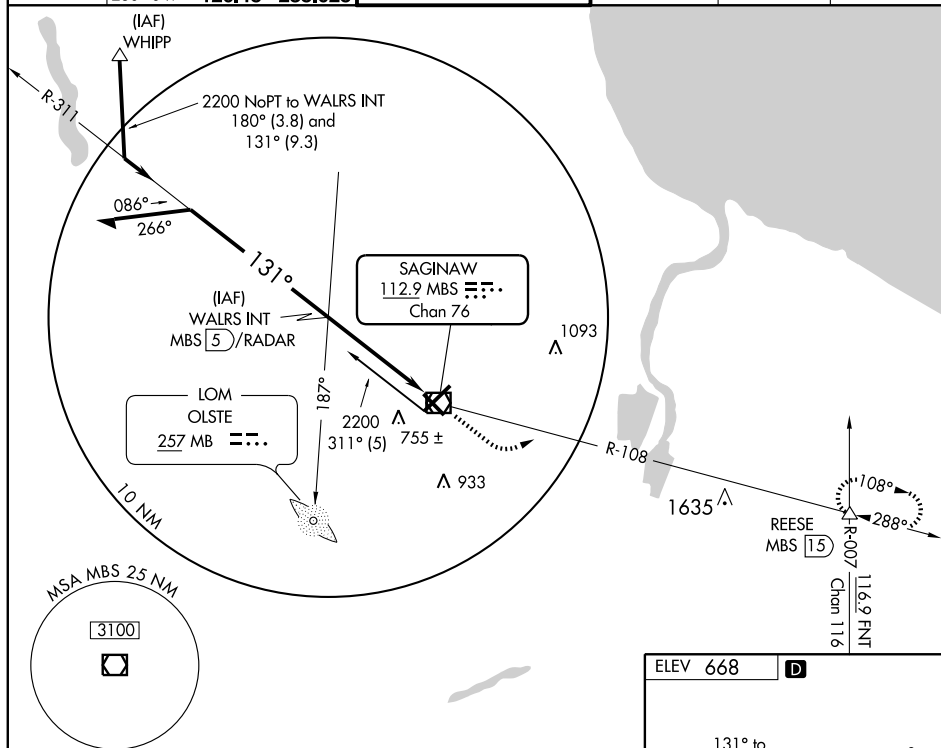
# VOR RWY 14

SAGINAW/MBS INTL (MBS)

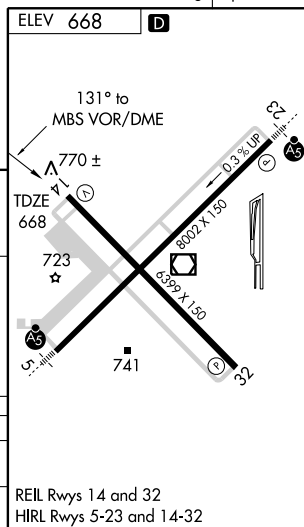
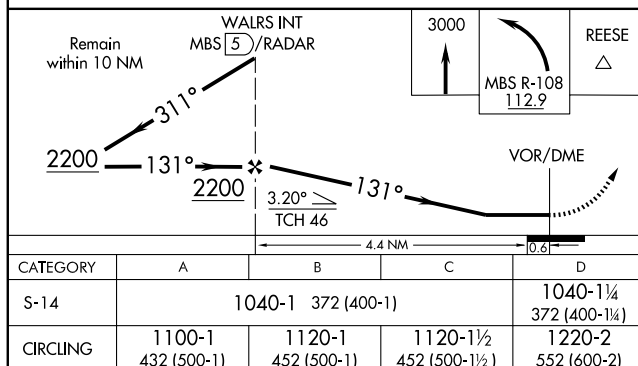
**ASR** Air carrier landing visibility reduction below  $\frac{3}{4}$  mile for local conditions NA.

MISSED APPROACH: Climb to 3000 then left turn via MBS R-108 to REESE Int/ 15 DME and hold.

ATIS <b>125.925</b>	SAGINAW APP CON★ 050°-229° <b>120.95 235.625</b> 230°-049° <b>126.45 235.625</b>	SAGINAW TOWER ★ <b>120.1</b> (CTAF) <b>257.7</b>	GND CON <b>121.7</b>	CLNC DEL <b>121.85</b>	UNICOM <b>122.95</b>
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**DME, ADF or RADAR REQUIRED**



VOR/DME MBS <b>112.9</b> Chan <b>76</b>	APP CRS <b>217°</b>	Rwy Idg TDZE Apt Elev <b>8002</b> <b>661</b> <b>668</b>
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# VOR RWY 23

SAGINAW/MBS INTL (MBS)

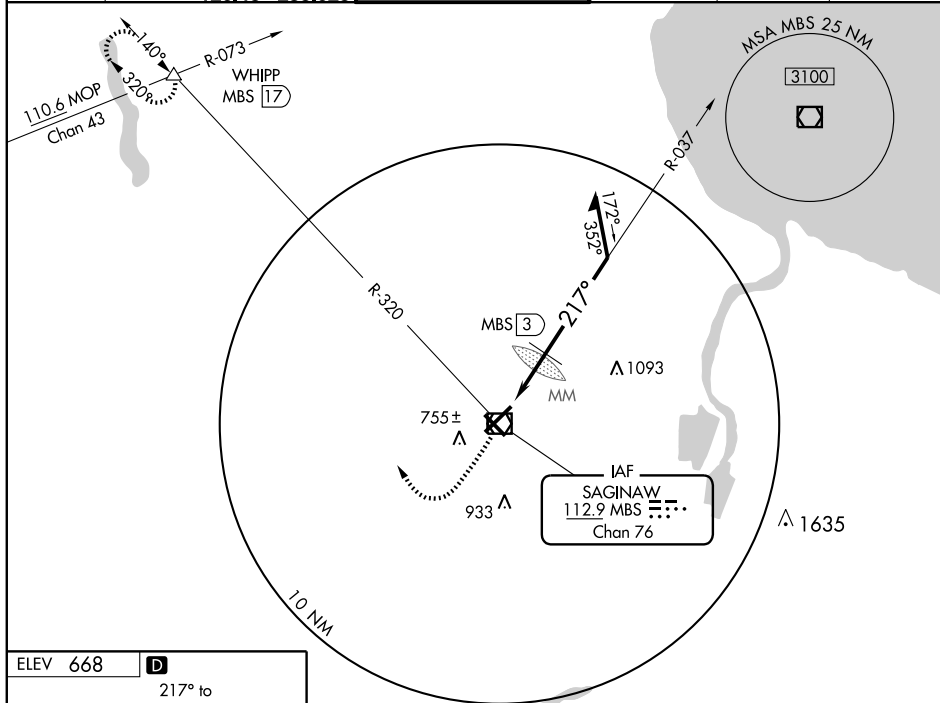


Cat. D S-23 DME minimums visibility increased ¼ mile for inoperative MALS/R.



MISSED APPROACH: Climb to 1100 then climbing right turn to 2600 via MBS R-320 to WHIPP Int/17 DME and hold.

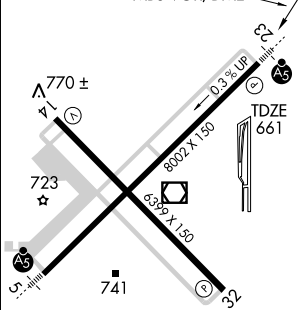
ATIS <b>125.925</b>	SAGINAW APP CON★ 050°-229° <b>120.95 235.625</b> 230°-049° <b>126.45 235.625</b>	SAGINAW TOWER★ 120.1(CTAF) <b>0 257.7</b>	GND CON <b>121.7</b>	CLNC DEL <b>121.85</b>	UNICOM <b>122.95</b>
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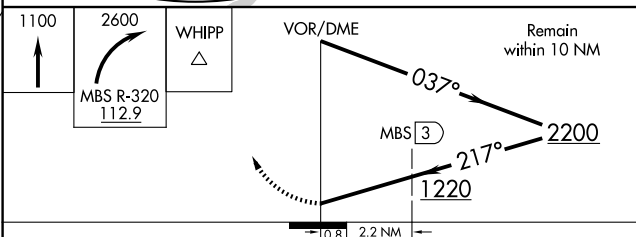
ELEV 668



217° to  
MBS VOR/DME



REIL Rwy 14 and 32  
HIRL Rwy 5-23 and 14-32



CATEGORY	A	B	C	D
S- 23	1220-½	559 (600-½)	1220-1 559 (600-1)	1220-1¼ 559 (600-1¼)
CIRCLING	1220-1	552 (600-1)	1220-1½ 552 (600-1½)	1220-2 552 (600-2)
DME MINIMA				
S- 23	1020-½ 359 (400-½)			1020-1 359 (400-1)
CIRCLING	1100-1 432 (500-1)	1120-1 452 (500-1)	1120-1½ 452 (500-1½)	1220-2 552 (600-2)

SAGINAW, MICHIGAN  
Amdt 14A 10266

43°32'N - 84°05'W

SAGINAW/MBS INTL (MBS)

# VOR RWY 23

VOR/DME MBS <b>112.9</b> Chan <b>76</b>	APP CRS <b>329°</b>	Rwy Idg <b>6399</b> TDZE <b>666</b> Apt Elev <b>668</b>
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VOR RWY 32  
SAGINAW/ MBS INTL (MBS)

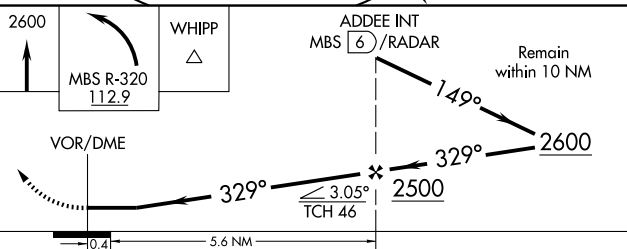
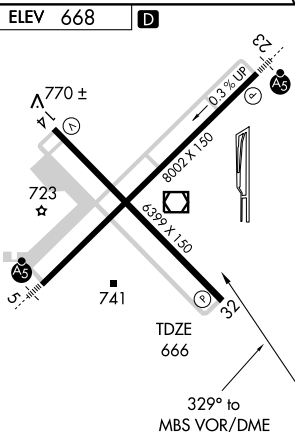
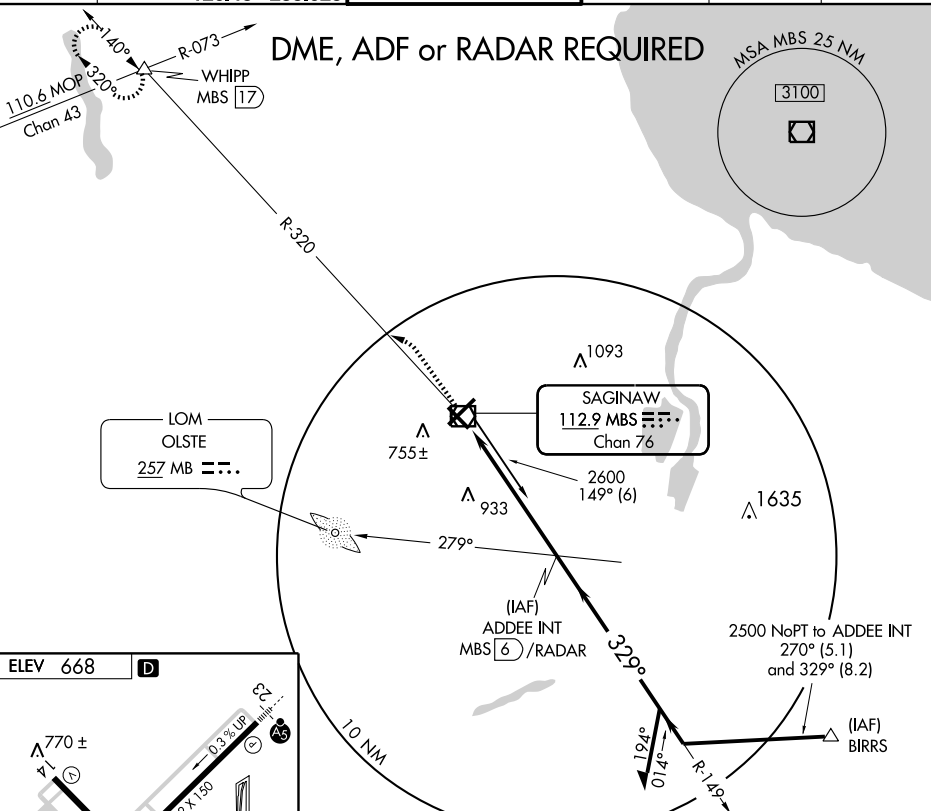


**MISSED APPROACH:** Climb to 2600 then left turn via MBS R-320 to WHIPP Int/17 DME and hold.

ATIS <b>125.925</b>	SAGINAW APP CON ★ 050°-229° <b>120.95 235.625</b> 230°-049° <b>126.45 235.625</b>	SAGINAW TOWER ★ <b>120.1 (CTAF) 0 257.7</b>	GND CON <b>121.7</b>	CLNC DEL <b>121.85</b>	UNICOM <b>122.95</b>
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DME, ADF or RADAR REQUIRED

MSA MBS 25 NM



REIL Rwys 14 and 32  
HIRL Rwys 5-23 and 14-32

SAGINAW/MBS INTL (MBS)

VOR RWY 32

Amdt 9B 10266

43°32'N - 84°05'W

EC-1. 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010

**SAULT STE MARIE****CHIPPEWA CO INTL** (CIU) 15 S UTC-5(-4DT) N46°15.05' W84°28.34'

LAKE HURON

800 B FUEL 100LL, JET A TPA-1600(800) AOE Class I, ARFF Index A NOTAM FILE CIU H-2L, L-31B  
RWY 16-34: H7200X200 (CONC-GRVD) S-155, D-330, 2S-175, 2D-600 HIRL IAP, AD

RWY 16: MALSR. PAPI(P4L)—GA 3.0° TCH 58'. Rgt tfc.

RWY 34: REIL. PAPI(P4L)—GA 3.0° TCH 40'.

RWY 09-27: H4999X75 (ASPH-GRVD) S-30, D-30 MIRL

RWY 09: REIL. PAPI(P4L)—GA 3.0° TCH 40'. Trees.

RWY 27: REIL. PAPI(P4L)—GA 3.0° TCH 40'. Trees.

**AIRPORT REMARKS:** Attended 1100-2300Z+. After hrs call

906-495-5532. Birds on and invof arpt. 24 hours PPR for unscheduled air carrier ops with more than 9 passenger seats; call arpt manager on 906-495-5631. Airfield sfc condition unmonitored 2100-1300Z+. Expect snow removal activity daily Dec-Mar. All twys closed except A, C and D from Dec to Apr. Check NOTAMs for specific schedule or cto arpt manager 906-495-5631. Vehicle testing in progress during winter months on sections of closed/abandoned parallel twy, SE of apch end Rwy 34. Area may be plowed to bare surface but is not avbl for acft arrivals or departures. ACTIVATE HIRL Rwy 16-34, MIRL Rwy 09-27, PAPI Rwy 16, Rwy 09 and Rwy 27, REIL Rwy 09, Rwy 27 and MALSR Rwy 16 and PAPI and REIL Rwy 34 Apr-Nov—CTAF. Rwy 34 PAPI and REIL opr continuously Dec-Mar. ARFF coverage provided scheduled FAR 121 acft only, other times by prior arrangement with airport manager. Flight Notification Service (ADCUS) available.

**WEATHER DATA SOURCES:** AWOS-3 127.575 (906) 495-7134.**COMMUNICATIONS:** CTAF/UNICOM 123.0

CHIPPEWA RCO 123.65 (GREEN BAY RADIO)

SAULT STE MARIE RCO 122.1R 112.2T (GREEN BAY RADIO)

TORONTO CENTER APP/DEP CON 132.65 (SAULT ENROUTE)

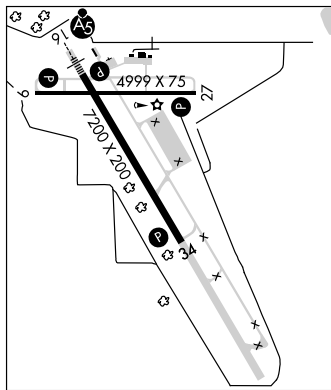
**RADIO AIDS TO NAVIGATION:** NOTAM FILE CIU.

SAULT STE MARIE (H) VOR/DME 112.2 SSM Chan 59 N46°24.73' W84°18.89' 218° 11.7 NM to fld. 687/4W.

KOLOE NDB (MH/LOM) 400 CI N46°19.93' W84°32.53' 155° 5.7 NM to fld.

NDB unmonitored.

ILS 110.3 I-CIU Rwy 16. Class IA. LOM KOLOE NDB. ILS unmonitored 0430Z+ Sun-1000Z+ Mon, 0430-1000Z+ Mon-Fri, 0430Z+ Fri-1145Z+ Sat and 1715Z+ Sat-1600Z+ Sun. ILS unusable MM inbound. Glide slope unusable blo 1012'.

**SAULT STE MARIE MUNI/SANDERSON FLD** (ANJ) 1SW UTC-5(-4DT) N46°28.75' W84°22.10'

LAKE HURON

716 FUEL 100LL, JET A NOTAM FILE ANJ

H-2L, 11A, L-31B

RWY 14-32: H5234X100 (ASPH) MIRL (NSTD) 0.4% up SE

IAP

RWY 14: REIL. PAPI (P2L)—GA 3.0° TCH 40'. Thld dspcd 180'.

RWY 32: REIL. PAPI (P2L)—GA 3.0° TCH 29'. Thld dspcd 178'. Road. Rgt tfc.

**AIRPORT REMARKS:** Attended 1400-2200Z+. Fuel after hrs self svc with credit card. Deer and birds on and invof arpt.

50' drop off, north end, 200' from rwy end. ACTIVATE MIRL Rwy 14-32, PAPI Rwy 14, Rwy 32 and REIL Rwy 14 and Rwy 32—CTAF-122.7. US customs on req call 906-632-2631. Call 1 hour prior to arrival.

**WEATHER DATA SOURCES:** ASOS 118.375 (906) 632-8501.**COMMUNICATIONS:** CTAF/UNICOM 122.7

TORONTO CENTER APP/DEP CON 132.65

**RADIO AIDS TO NAVIGATION:** NOTAM FILE CIU.

SAULT STE MARIE (H) VOR/DME 112.2 SSM Chan 59 N46°24.73' W84°18.89' 335° 4.6 NM to fld. 687/4W.

**COMM/NAV/WEATHER REMARKS:** Acft operating within Sault Ste Marie. Ontario Arpt traffic area maintain communications with Sault Ste Marie Ontario twr on frequency 118.8. Pilots operating in Canadian/US Class D Airspace are required to establish and maintain two-way communication and obtain ATC clearance from Sault Ste Marie Twr (SOO TOWER 118.8) prior to operating in the Class D Airspace. Traffic Advisory Service (118.8) is avbl in the US Class E Surface Extension 1200-0100Z+.

**SAWYER INTL** (See MARQUETTE)**SCHIFFER ACRES** (See ST JOHNS)**SCHOOLCRAFT CO** (See MANISTIQUE)

VOR/DME SSM  
**112.2**  
 Chan **59**

APP CRS  
**337°**

Rwy Idg  
 TDZE  
 Apt Elev **716**

# VOR or GPS RWY 32

SAULT STE MARIE/ SANDERSON FIELD (ANJ)



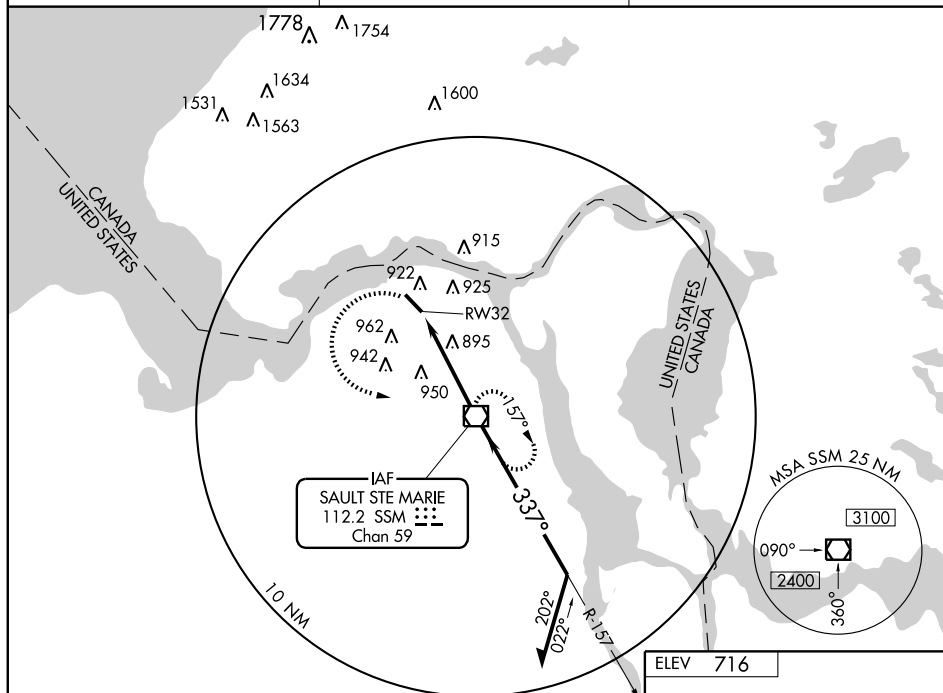
Visibility reduction by helicopters NA.

MISSED APPROACH: Climbing left turn to 2400 direct  
 SSM VOR/DME and hold.

ASOS  
**118.375**

TORONTO CENTER  
**132.65 344.5**

UNICOM  
**122.7 (CTAF) 0**



ELEV 716

2400 SSM

VOR/DME

Remain  
 within 10 NM

RW32  
 SSM 4.2

2000

CATEGORY	A	B	C	D
S-32	1260-1	544 (600-1)	NA	
CIRCLING	1280-1 564 (600-1)	1300-1 584 (600-1)	NA	

MIRL Rwy 14-32 0  
 REIL Rwy 14 and 32 0

FAF to MAP 4.2 NM					
Knots	60	90	120	150	180
Min:Sec	4:12	2:48	2:06	1:41	1:24

SAULT STE MARIE, MICHIGAN

Amdt 2A 03JUN10

SAULT STE MARIE/ SANDERSON FIELD (ANJ)

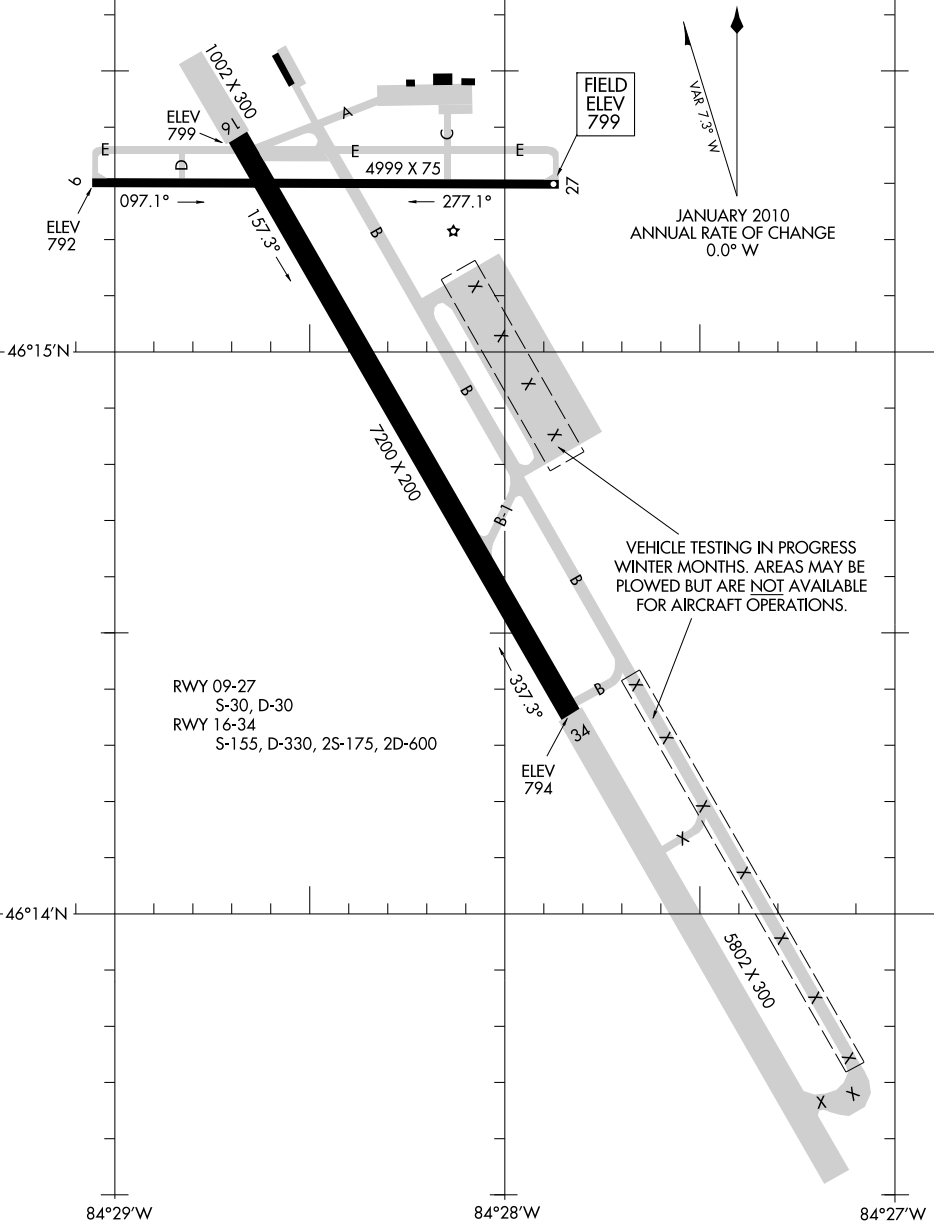
46°29'N - 84°22'W

# VOR or GPS RWY 32

10210

## AIRPORT DIAGRAM

AL-810 (FAA)

SAULT STE MARIE/CHIPPEWA COUNTY INTL (CIU)  
SAULT STE MARIE, MICHIGANAWOS-3  
127.575  
CTAF/UNICOM  
123.0

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010

## AIRPORT DIAGRAM

SAULT STE MARIE, MICHIGAN  
SAULT STE MARIE/CHIPPEWA COUNTY INTL (CIU)

10210

**SAULT STE MARIE****CHIPPEWA CO INTL** (CIU) 15 S UTC-5(-4DT) N46°15.05' W84°28.34'

LAKE HURON

800 B FUEL 100LL, JET A TPA-1600(800) AOE Class I, ARFF Index A NOTAM FILE CIU H-2L, L-31B  
RWY 16-34: H7200X200 (CONC-GRVD) S-155, D-330, 2S-175, 2D-600 HIRL IAP, AD

RWY 16: MALSR. PAPI(P4L)—GA 3.0° TCH 58'. Rgt tfc.

RWY 34: REIL. PAPI(P4L)—GA 3.0° TCH 40'.

RWY 09-27: H4999X75 (ASPH-GRVD) S-30, D-30 MIRL

RWY 09: REIL. PAPI(P4L)—GA 3.0° TCH 40'. Trees.

RWY 27: REIL. PAPI(P4L)—GA 3.0° TCH 40'. Trees.

**AIRPORT REMARKS:** Attended 1100-2300Z+. After hrs call

906-495-5532. Birds on and invof arpt. 24 hours PPR for unscheduled air carrier ops with more than 9 passenger seats; call arpt manager on 906-495-5631. Airfield sfc condition unmonitored 2100-1300Z+. Expect snow removal activity daily Dec-Mar. All twys closed except A, C and D from Dec to Apr. Check NOTAMs for specific schedule or cto arpt manager 906-495-5631. Vehicle testing in progress during winter months on sections of closed/abandoned parallel twy, SE of apch end Rwy 34. Area may be plowed to bare surface but is not avbl for acft arrivals or departures. ACTIVATE HIRL Rwy 16-34, MIRL Rwy 09-27, PAPI Rwy 16, Rwy 09 and Rwy 27, REIL Rwy 09, Rwy 27 and MALSR Rwy 16 and PAPI and REIL Rwy 34 Apr-Nov—CTAF. Rwy 34 PAPI and REIL opr continuously Dec-Mar. ARFF coverage provided scheduled FAR 121 acft only, other times by prior arrangement with airport manager. Flight Notification Service (ADCUS) available.

**WEATHER DATA SOURCES:** AWOS-3 127.575 (906) 495-7134.**COMMUNICATIONS:** CTAF/UNICOM 123.0

CHIPPEWA RCO 123.65 (GREEN BAY RADIO)

SAULT STE MARIE RCO 122.1R 112.2T (GREEN BAY RADIO)

TORONTO CENTER APP/DEP CON 132.65 (SAULT ENROUTE)

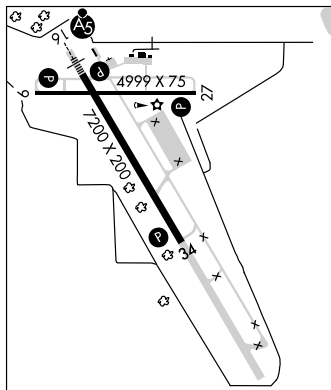
**RADIO AIDS TO NAVIGATION:** NOTAM FILE CIU.

SAULT STE MARIE (H) VOR/DME 112.2 SSM Chan 59 N46°24.73' W84°18.89' 218° 11.7 NM to fld. 687/4W.

KOLOE NDB (MH/LOM) 400 CI N46°19.93' W84°32.53' 155° 5.7 NM to fld.

NDB unmonitored.

ILS 110.3 I-CIU Rwy 16. Class IA. LOM KOLOE NDB. ILS unmonitored 0430Z+ Sun-1000Z+ Mon, 0430-1000Z+ Mon-Fri, 0430Z+ Fri-1145Z+ Sat and 1715Z+ Sat-1600Z+ Sun. ILS unusable MM inbound. Glide slope unusable blo 1012'.

**SAULT STE MARIE MUNI/SANDERSON FLD** (ANJ) 1SW UTC-5(-4DT) N46°28.75' W84°22.10'

LAKE HURON

716 FUEL 100LL, JET A NOTAM FILE ANJ

H-2L, 11A, L-31B

RWY 14-32: H5234X100 (ASPH) MIRL (NSTD) 0.4% up SE

IAP

RWY 14: REIL. PAPI (P2L)—GA 3.0° TCH 40'. Thld dspcd 180'.

RWY 32: REIL. PAPI (P2L)—GA 3.0° TCH 29'. Thld dspcd 178'. Road. Rgt tfc.

**AIRPORT REMARKS:** Attended 1400-2200Z+. Fuel after hrs self svc with credit card. Deer and birds on and invof arpt.

50' drop off, north end, 200' from rwy end. ACTIVATE MIRL Rwy 14-32, PAPI Rwy 14, Rwy 32 and REIL Rwy 14 and Rwy 32—CTAF-122.7. US customs on req call 906-632-2631. Call 1 hour prior to arrival.

**WEATHER DATA SOURCES:** ASOS 118.375 (906) 632-8501.**COMMUNICATIONS:** CTAF/UNICOM 122.7

TORONTO CENTER APP/DEP CON 132.65

**RADIO AIDS TO NAVIGATION:** NOTAM FILE CIU.

SAULT STE MARIE (H) VOR/DME 112.2 SSM Chan 59 N46°24.73' W84°18.89' 335° 4.6 NM to fld. 687/4W.

**COMM/NAV/WEATHER REMARKS:** Acft operating within Sault Ste Marie. Ontario Arpt traffic area maintain communications with Sault Ste Marie Ontario twr on frequency 118.8. Pilots operating in Canadian/US Class D Airspace are required to establish and maintain two-way communication and obtain ATC clearance from Sault Ste Marie Twr (SOO TOWER 118.8) prior to operating in the Class D Airspace. Traffic Advisory Service (118.8) is avbl in the US Class E Surface Extension 1200-0100Z+.

**SAWYER INTL** (See MARQUETTE)**SCHIFFER ACRES** (See ST JOHNS)**SCHOOLCRAFT CO** (See MANISTIQUE)



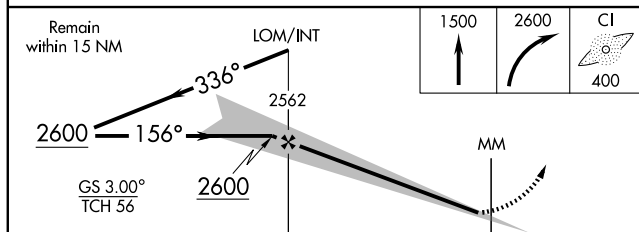
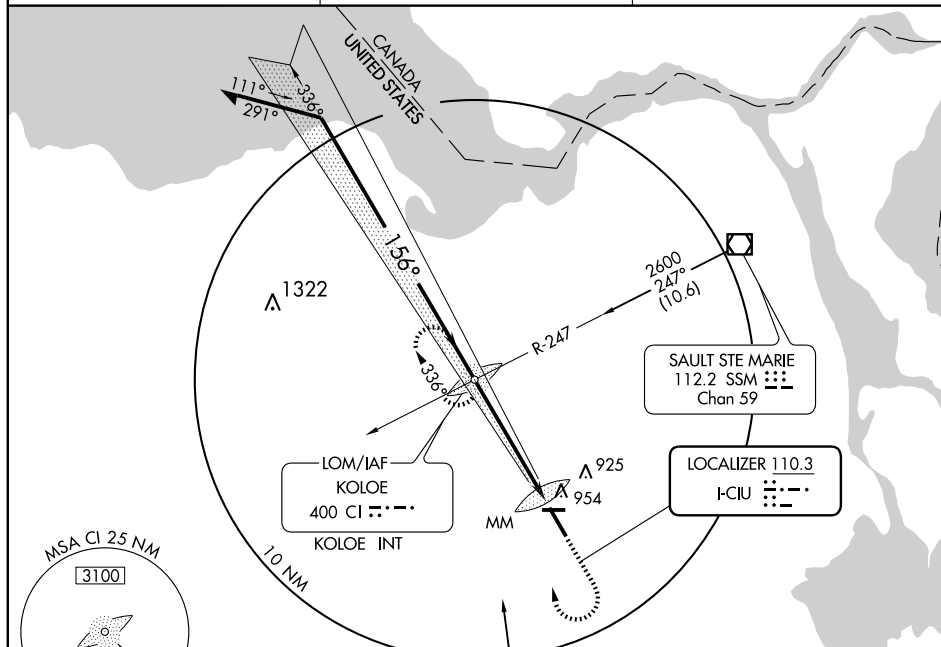
## ILS RWY 16

SAULT STE MARIE/CHIPPEWA COUNTY INTL (CIU)

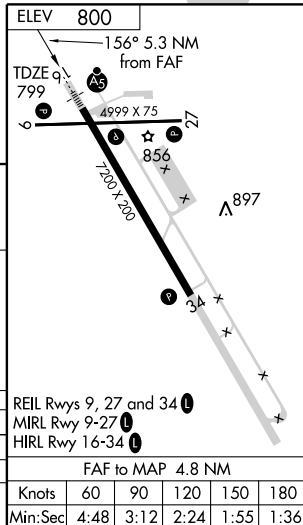
LOC I-CIU <b>110.3</b>	APP CRS <b>156°</b>	Rwy Idg TDZE Apt Elev	<b>7200</b> <b>799</b> <b>800</b>
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<b>NA</b>	ILS unusable from MM inbound.	MALSR 	MISSED APPROACH: Climb to 1500 then climbing right turn to 2600 direct CI LOM/Int and hold. (TACAN aircraft climb to 5000 via 160° heading and SSM R-201 to PINES Int/24 DME and hold South, 021° inbound).
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AWOS-3 <b>127.575</b>	TORONTO CENTER <b>132.65 344.5</b>	UNICOM <b>123.0 (CTAF) 0</b>
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CATEGORY	A	B	C	D	E
S-ILS 16	1049-½	250 (300-½)		1049-¾	250 (300-¾)
S-LOC 16	1160-½	361 (400-½)		1160-¾	361 (400-¾)
CIRCLING	1260-1	460 (500-1)	1260-1½ 460 (500-1½)	1360-2 560 (600-2)	1380-2 580 (600-2)



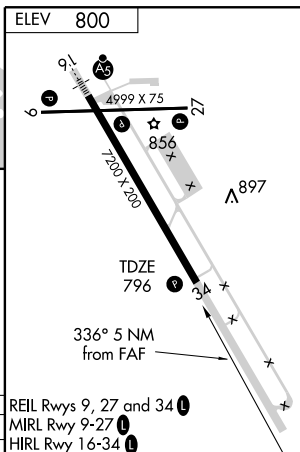
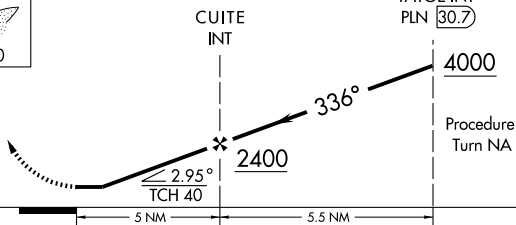
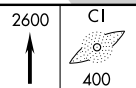
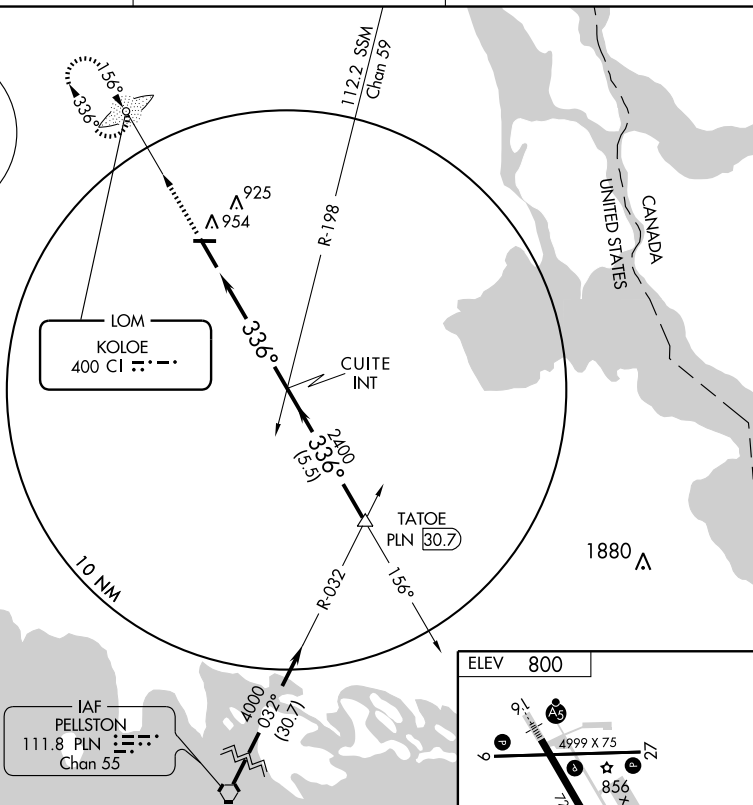
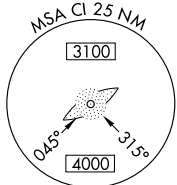
LOM CI <b>400</b>	APP CRS <b>336°</b>	Rwy Idg TDZE Apt Elev	<b>7200</b> <b>796</b> <b>800</b>
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**NDB RWY 34**

SAULT STE MARIE/CHIPPEWA COUNTY INTL (CIU)

▲ NA

MISSED APPROACH: Climb to 2600 direct CI LOM and hold.

AWOS-3  
**127.575**TORONTO CENTER  
**132.65 344.5**UNICOM  
**123.0 (CTAF) 0**

REIL Rwy 9, 27 and 34  
MIRL Rwy 9-27  
HIRL Rwy 16-34

FAF to MAP 5 NM					
Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40

## RNAV (GPS) RWY 9

SAULT STE MARIE/ CHIPPEWA COUNTY INTL (CIU)

APP CRS <b>096°</b>	Rwy Idg TDZE <b>795</b> Apt Elev <b>800</b>	<b>4999</b>
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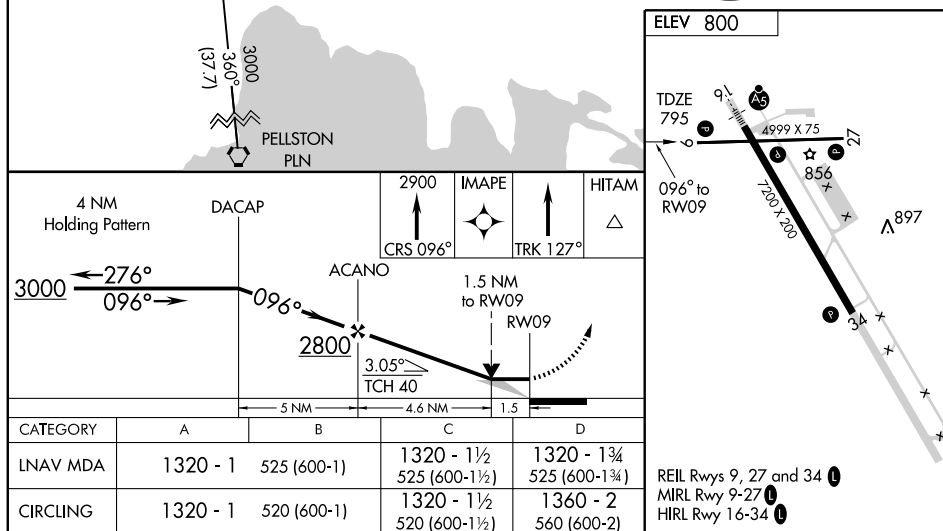
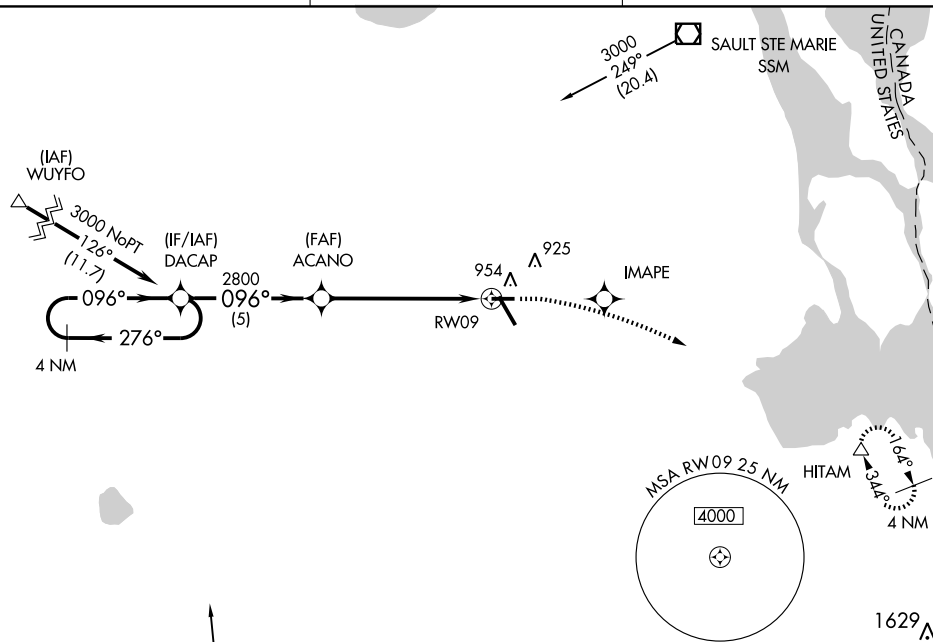
Straight-in minimums NA at night.  
GPS or RNP-0.3 required.  
DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 2900 via 096° course to  
IMAPE WP and via 127° track to HITAM WP and hold.

AWOS-3  
**127.575**

TORONTO CENTER  
**132.65 344.5**

UNICOM  
**123.0 (CTAF)**



SAULT STE MARIE, MICHIGAN

Orig 08157

SAULT STE MARIE/ CHIPPEWA COUNTY INTL (CIU)

46°15'N - 84°28'W

RNAV (GPS) RWY 9

WAAS CH <b>69215</b> <b>W16A</b>	APP CRS <b>156°</b>	Rwy Idg TDZE Apt Elev	<b>7200</b> <b>799</b> <b>800</b>
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## RNAV (GPS) RWY 16

SAULT STE MARIE/CHIPPEWA COUNTY INTL (CIU)

- For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -1.6°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Sault Ste Marie Muni/Sanderson Field altimeter setting and increase all DA 45 feet and all MDA 60 feet. Baro-VNAV and VDP NA when using Sault Ste Marie Muni/Sanderson Field altimeter setting. For inoperative MALS, increase LPV all Cats, LNAV/VNAV all Cats and LNAV Cats A/B/C ½ mile, increase LNAV Cat D ¼ mile. For inoperative MALS, when using Sault Ste Marie Muni/Sanderson Field altimeter setting, increase LPV all Cats, LNAV/VNAV all Cats and LNAV all Cats ½ mile.

MALSR

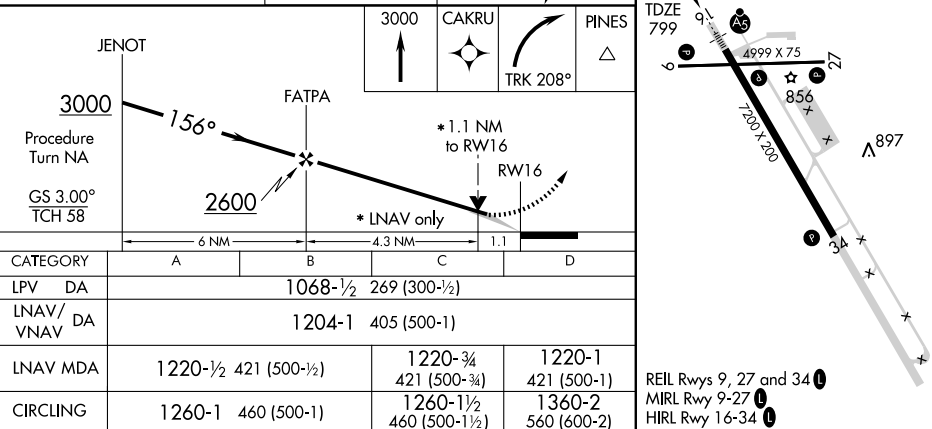
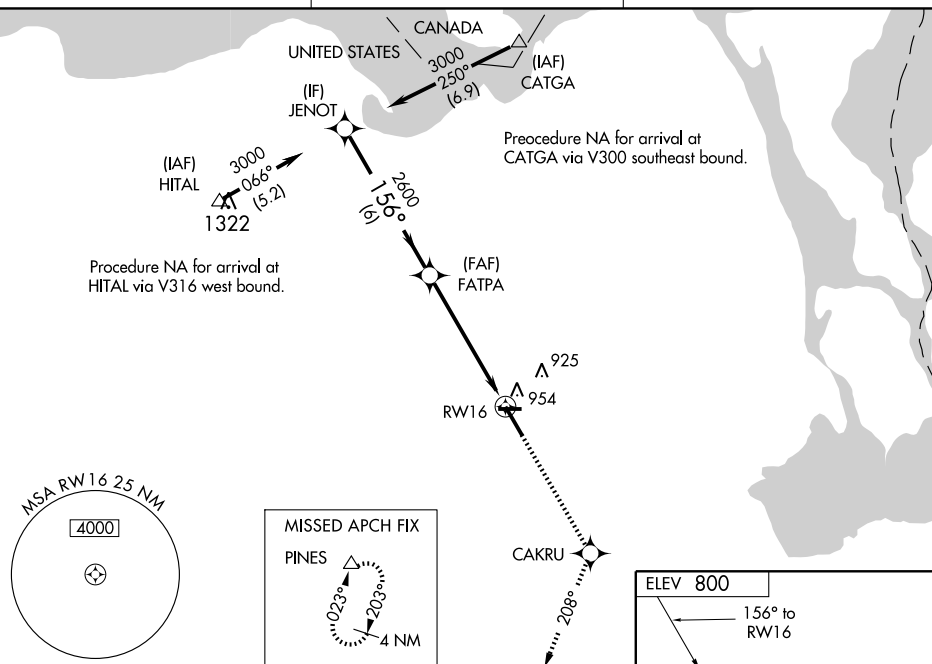


MISSED APPROACH: Climb to 3000 direct CAKRU and right turn via track 208° to PINES and hold.

AWOS-3  
**127.575**

TORONTO CENTER  
**132.65 344.5**

UNICOM  
**123.0 (CTAF) 0**



SAULT STE MARIE, MICHIGAN

Amdt 1 22OCT09

SAULT STE MARIE/CHIPPEWA COUNTY INTL (CIU)

46°15'N - 84°28'W

RNAV (GPS) RWY 16

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010

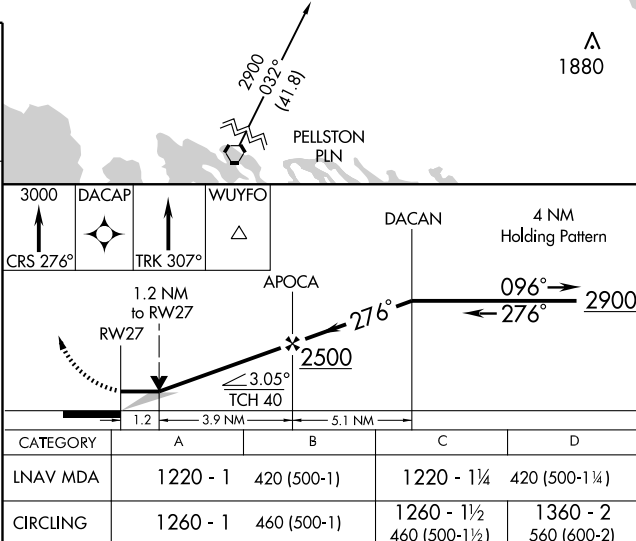
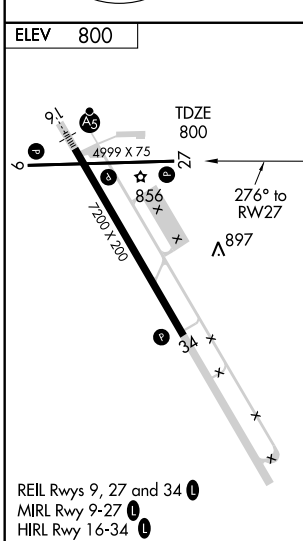
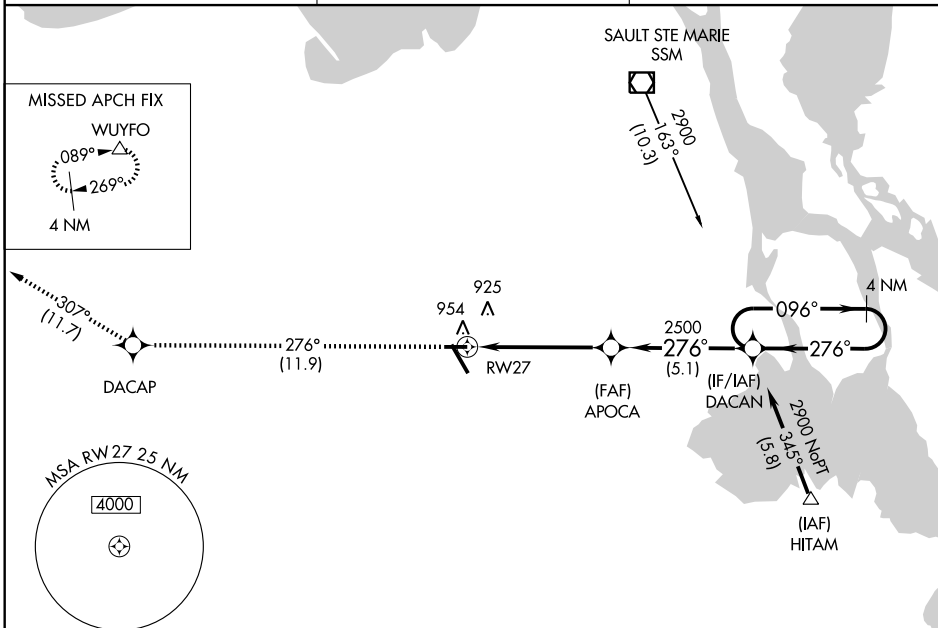
APP CRS <b>276°</b>	Rwy Idg TDZE Apt Elev	<b>4999</b> <b>800</b> <b>800</b>
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## RNAV (GPS) RWY 27

SAULT STE MARIE/ CHIPPEWA COUNTY INTL (CIU)

<b>▲ NA</b>	Straight-in minimums NA at night. GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.	MISSED APPROACH: Climb to 3000 via 276° course to DACAP WP and via 307° track to WUYFO WP and hold.
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AWOS-3 <b>127.575</b>	TORONTO CENTER <b>132.65 344.5</b>	UNICOM <b>123.0 (CTAF) 0</b>
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SAULT STE MARIE, MICHIGAN

Orig 09351

SAULT STE MARIE/ CHIPPEWA COUNTY INTL (CIU)

46°15'N - 84°28'W

## RNAV (GPS) RWY 27

WAAS CH <b>56315</b> <b>W34A</b>	APP CRS <b>336°</b>	Rwy Idg TDZE Apt Elev	<b>7200</b> <b>796</b> <b>800</b>
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## RNAV (GPS) RWY 34

SAULT STE MARIE/ CHIPPEWA COUNTY INTL (CIU)

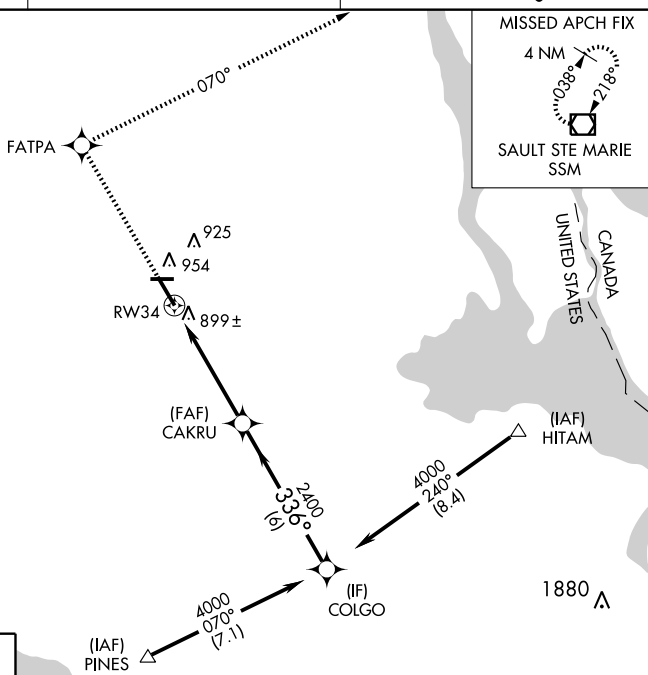
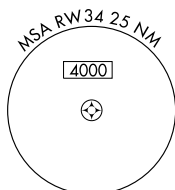
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Sault Ste Marie Muni/Sanderson Field altimeter setting and increase all DA 45 feet and all MDA 60 feet; increase LNAV Cat D visibility ¼ mile. Baro-VNAV and VDP NA when using Sault Ste Marie Muni/Sanderson Field altimeter setting.

MISSED APPROACH: Climb to 3000 direct FATPA and right turn via track 070° to SSM VOR/DME and hold.

AWOS-3  
**127,575**

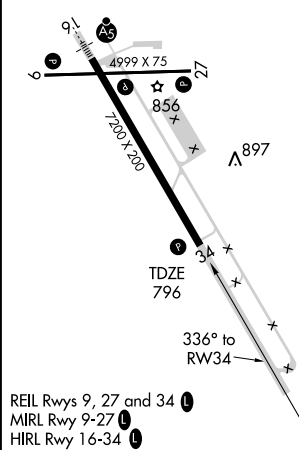
TORONTO CENTER  
**132.65 344.5**

UNICOM  
**123.0 (CTAF) 0**



Procedure NA for arrival at PINES via V193 south bound.

ELEV 800



COLGO				
4000				
Procedure Turn NA				
GS 3.00° TCH 40				
<div> <div>3000</div> <div>FATPA</div> <div>SSM</div> <div>TRK 070°</div> </div>				
<div> <div>336°</div> <div>2400</div> <div>*1.2 NM to RW34</div> <div>*LNAV only</div> </div>				
<div> <div>6 NM</div> <div>3.7 NM</div> <div>1.2 NM</div> </div>				
CATEGORY	A	B	C	D
LPV DA	1046-1		250 (300-1)	
LNAV/VNAV DA	1198-1½		402 (400-1½)	
LNAV MDA	1200-1	404 (400-1)	1200-1¼	404 (400-1¼)
CIRCLING	1260-1	460 (500-1)	1260-1½	1360-2
			460 (500-1½)	560 (600-2)

SAULT STE MARIE, MICHIGAN

Amdt 1 22OCT09

SAULT STE MARIE/ CHIPPEWA COUNTY INTL (CIU)

46°15'N - 84°28'W

RNAV (GPS) RWY 34

VOR/DME SSM <b>112.2</b> Chan <b>59</b>	APP CRS <b>218°</b>	Rwy Idg TDZE Apt Elev <b>800</b>	<b>N/A</b> <b>N/A</b> <b>800</b>
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VOR-A

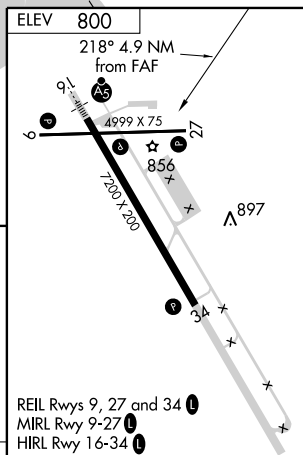
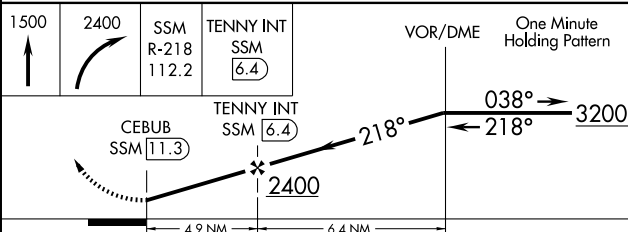
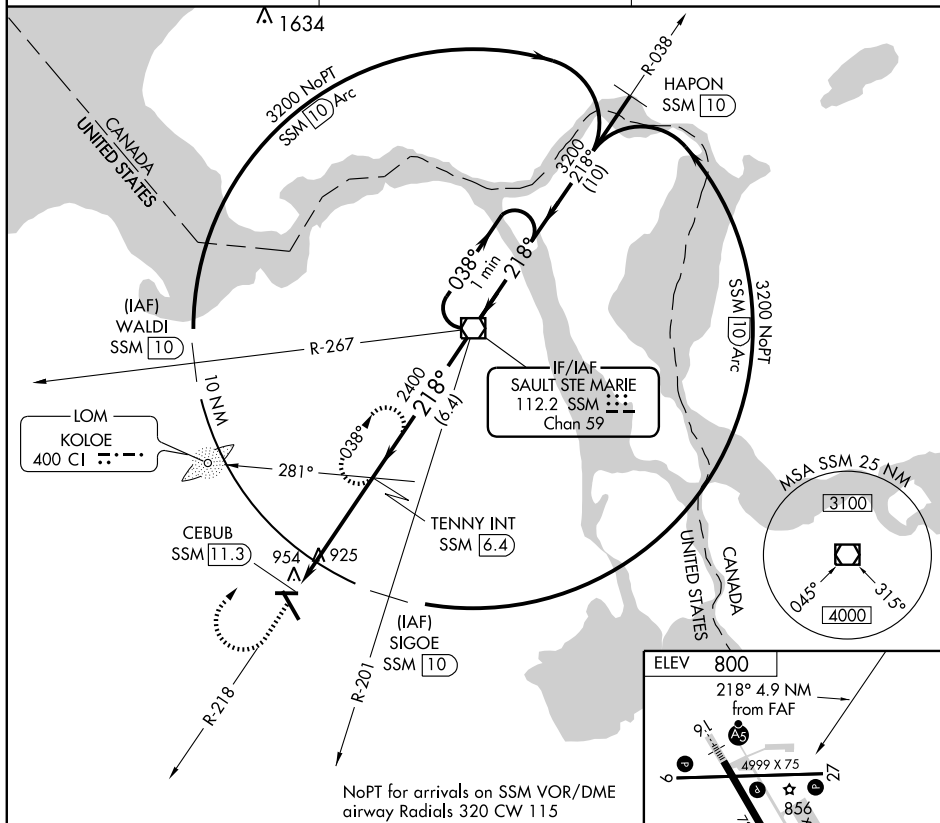
SAULT STE MARIE/ CHIPPEWA COUNTY INTL (CIU)

**T** DME or ADF REQUIRED. When local altimeter setting not received, use Sault Ste Marie Muni/Sanderson **A** Field altimeter setting and increase all MDA 60 feet.

**MISSED APPROACH:** Climb to 1500 then climbing right turn to 2400 via SSM R-218 to TENNY Int/6.4 DME and hold.

AWOS-3  
**127.575**

TORONTO CENTER  
132.65 344.5

UNICOM  
123.0 (CTAF) **L**

CATEGORY	A	B	C	D
CIRCLING	1260-1	460 (500-1)	1260-1½ 460 (500-1½)	1360-2 560 (600-2)

FAF to MAP 4.9 NM					
Knots	60	90	120	150	180
Min:Sec	4:54	3:16	2:27	1:58	1:38

SAULT STE MARIE, MICHIGAN

Amdt 7 22OCT09

SAULT STE MARIE/ CHIPPEWA COUNTY INTL (CIU)

46°15'N - 84°28'W

VOR-A

**EC-1, 23 SEP 2010 to 21 OCT 2010**

EC-1. 23 SEP 2010 to 21 OCT 2010

## SIDNAW

PRICKETT-GROOMS FLD (6Y9) 1 NE UTC-5(-4DT) N46°31.52' W88°42.35'

GREEN BAY

1372 NOTAM FILE GRB

RWY 10-28: 2600X100 (TURF)

RWY 10: Thld dsplcd 300'. Trees. RWY 28: Trees.

AIRPORT REMARKS: Unattended. Rwy not plowed. Arpt CLOSED Nov-Apr and when snow covered. Rwy 10-28 sfc soft when wet, call 906-355-2257 to verify condition. Rwy 10-28 marked with 3' yellow cones.

COMMUNICATIONS: CTAF 122.9

SILVER CITY AIRPARK (See ALPENA)

SKYWAY ESTATES (See EATON RAPIDS)

SOUTH HAVEN AREA RGNL (LWA) 3 S UTC-5(-4DT) N42°21.07' W86°15.34'

CHICAGO

666 B S4 FUEL 100LL, JET A NOTAM FILE LAN

L-281

RWY 04-22: H4801X75 (ASPH) S-12 MIRL 0.3% up NE

IAP

RWY 04: REIL. PAPI (P4L)—GA 3.5° TCH 33'. Trees.

RWY 22: REIL. PAPI (P4L)—GA 3.5° TCH 33'. Tree.

RWY 14-32: 3275X190 (TURF)

RWY 14: Thld dsplcd 963'. Trees. RWY 32: Thld dsplcd 762'. Tree.

AIRPORT REMARKS: Attended 1400-2200Z±. Deer on and invof arpt. Rwy 14 and Rwy 32 dsplcd thlds marked with three 3' yellow cones. MIRL Rwy 04-22 preset low ints; dusk-0400Z±; to increase ints and ACTIVATE REIL and PAPI Rwy 04 and Rwy 22—CTAF. After 0400Z± ACTIVATE CTAF.

WEATHER DATA SOURCES: AWOS-3 118.025 (269)637-7016.

COMMUNICATIONS: CTAF/UNICOM 122.8

PULLMAN RCO 122.1R, 112.1T (LANSING RADIO)

SOUTH BEND APP/DEP CON 118.55 (Sun-Fri 1030-0500Z±, Sat 1030-0445Z±, other times ctc

CHICAGO CENTER APP/DEP CON 128.5

GCO 121.725 (FLIGHT SERVICES)

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

PULLMAN (H) VOR/DME 112.1 PMM Chan 58 N42°27.96' W86°06.29' 224° 9.6 NM to fld. 640/00E.

SOUTHWEST MICHIGAN RGNL (See BENTON HARBOR)

## SPARTA

PAUL C. MILLER-SPARTA (8D4) 3 SE UTC-5(-4DT) N43°07.63' W85°40.70'

CHICAGO

775 B S4 FUEL 100LL, MOGAS NOTAM FILE LAN

L-281

RWY 07-25: H4033X75 (ASPH) S-24 MIRL

IAP

RWY 07: REIL. PAPI(P2L)—GA 3.5° TCH 22'. Trees.

RWY 25: REIL. PAPI(P2R)—GA 3.5° TCH 27'. Trees. 0.7% up W.

AIRPORT REMARKS: Attended irregularly. Powered parachute ops north side of rwy. Deer on and invof arpt. ACTIVATE MIRL Rwy 07-25 and PAPI Rwy 07-25—CTAF.

WEATHER DATA SOURCES: AWOS-A 132.95 (616) 887-2039. ASOS-A 122.8 (616) 887-2039.

COMMUNICATIONS: CTAF/UNICOM 122.8

® GRAND RAPIDS APP/DEP CON 124.6 (1030-0500Z±)

CHICAGO CENTER APP/DEP CON 128.5 (0500-1030Z±)

RADIO AIDS TO NAVIGATION: NOTAM FILE MKG.

MUSKEGON (L) VORTACW 115.2 MKG Chan 99 N43°10.16' W86°02.36' 100° 16.1 NM to fld. 659/1W.

HIWAS.

SPENC N42°13.20' W83°12.20' NOTAM FILE DTW.

DETROIT

NDB (LOM) 223 DM 272° 6.7 NM to Detroit Metropolitan Wayne Co.

A

STAMBAUGH (See IRON RIVER)

## STANWOOD

CAIN FLD (38C) 2 SE UTC-5(-4DT) N43°36.00' W85°29.59'

CHICAGO

889 S4 NOTAM FILE LAN

RWY 18-36: 3450X100 (TURF)

RWY 18: Thld dsplcd 486'. Trees. RWY 36: Thld dsplcd 384'. Tree.

AIRPORT REMARKS: Attended irregularly. Fuel avbl for emergencies only. Radio control acft activity on and invof arpt. Occasional deer activity on and invof arpt. Rwy 18-36 and dsplcd thlds marked with 3' yellow cones.

COMMUNICATIONS: CTAF 122.9

STURGIS N41°48.79' W85°26.03' NOTAM FILE IRS.

CHICAGO

NDB (MHW) 382 IRS at Kirsch Muni.

L-281



APP CRS <b>047°</b>	Rwy Idg <b>4801</b>
	TDZE <b>659</b>
	Apt Elev <b>666</b>

# RNAV (GPS) RWY 4

## SOUTH HAVEN AREA RGNL (L.W.A.)

**⚠** When local altimeter setting not received, use South Bend altimeter setting and increase all MDA 120 feet. Increase LNAV visibility Cat C ¼ mile, Cat D ½ mile and Circling visibility Cat D ¼ mile. DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA

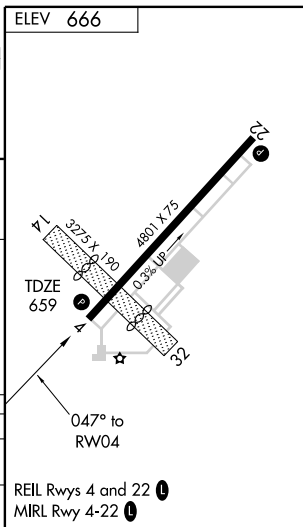
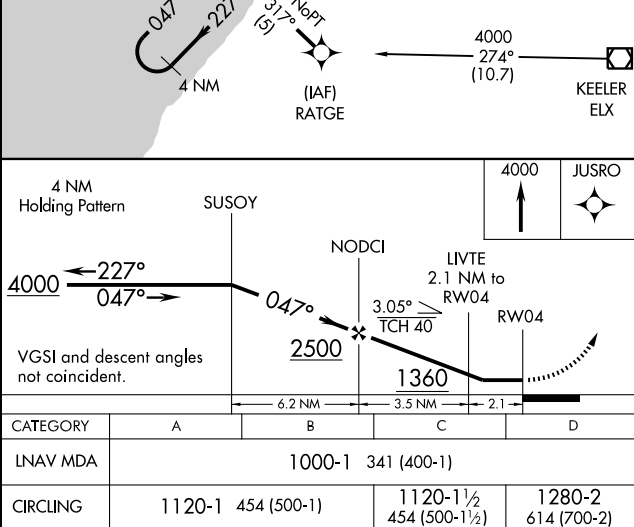
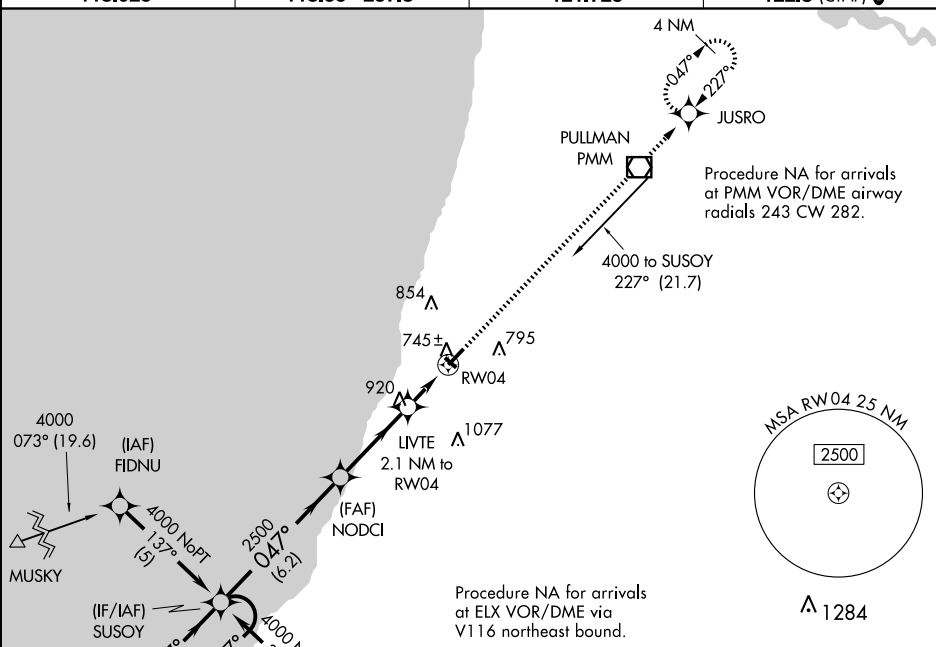
**MISSED APPROACH:** Climb to 4000 direct JUSRO and hold. Continue climb-in-hold to 4000.

AWOS-3  
**118.025**

SOUTH BEND APP CON ★  
**118.55 257.8**

GCO  
**121.725**

UNICOM  
**122.8 (CTAF) ①**



EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010



VOR/DME PMM <b>112.1</b> Chan <b>58</b>	APP CRS <b>224°</b>	Rwy Idg <b>4801</b> TDZE <b>665</b> Apt Elev <b>666</b>
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VOR RWY 22

SOUTH HAVEN AREA RGNL (LWA)

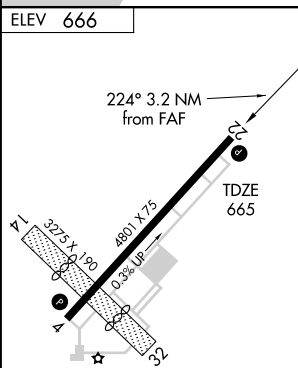
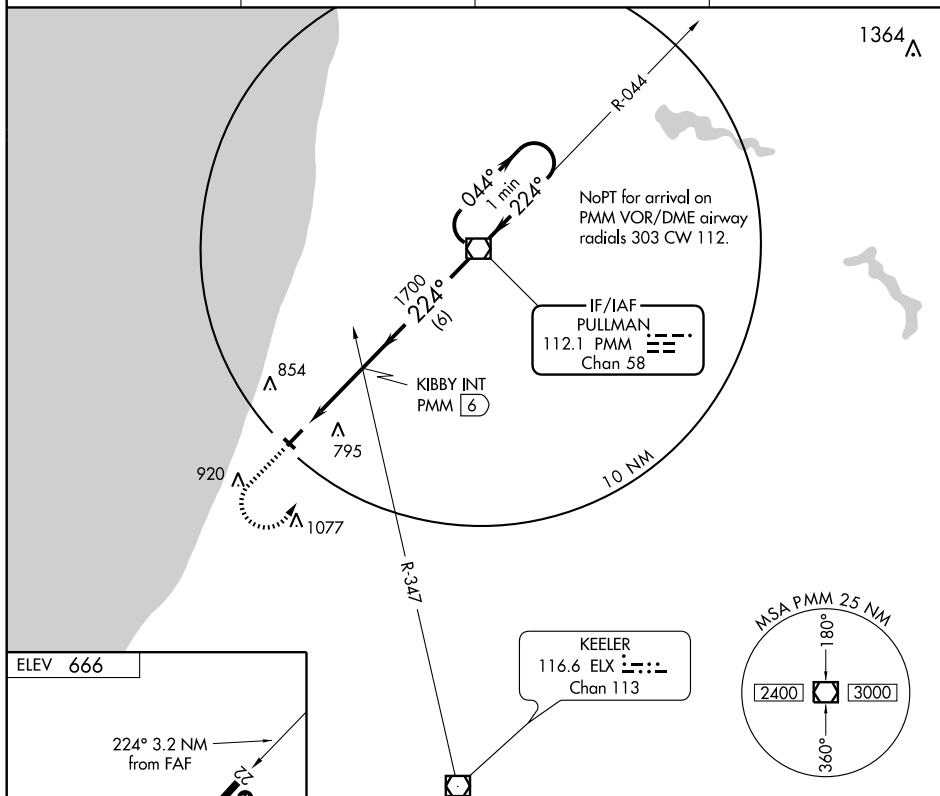
**T** When local altimeter setting not received, use South Bend altimeter setting and increase all MDA 120 feet. Increase S-22 visibility Cat C  $\frac{1}{4}$  mile, Cat D  $\frac{1}{2}$  mile and Circling Cat D  $\frac{1}{4}$  mile. Visibility reduction by helicopters NA.

**MISSED APPROACH:** Climb to 2500 then climbing left turn to 4000 direct PMM VOR/DME and hold.

AWOS-3  
118.025

SOUTH BEND APP CON ★  
118.55 257.8

GCO  
121.725

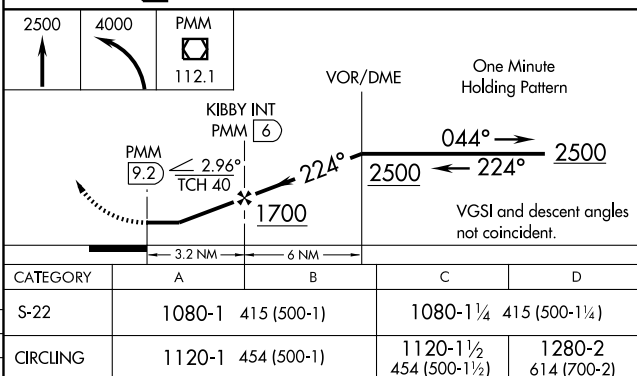
UNICOM  
122.8 (CTAF) **L**

REIL Rwy 4 and 22 **L**  
MIRL Rwy 4-22 **L**

FAF to MAP 3.2 NM

Knots	60	90	120	150	180
Min:Sec	3:12	2:08	1:36	1:17	1:04

SOUTH HAVEN, MICHIGAN  
Amdt 10 09351



SOUTH HAVEN AREA RGNL (LWA)

VOR RWY 22

## SIDNAW

PRICKETT-GROOMS FLD (6Y9) 1 NE UTC-5(-4DT) N46°31.52' W88°42.35'

GREEN BAY

1372 NOTAM FILE GRB

RWY 10-28: 2600X100 (TURF)

RWY 10: Thld dsplcd 300'. Trees. RWY 28: Trees.

AIRPORT REMARKS: Unattended. Rwy not plowed. Arpt CLOSED Nov-Apr and when snow covered. Rwy 10-28 sfc soft when wet, call 906-355-2257 to verify condition. Rwy 10-28 marked with 3' yellow cones.

COMMUNICATIONS: CTAF 122.9

SILVER CITY AIRPARK (See ALPENA)

SKYWAY ESTATES (See EATON RAPIDS)

SOUTH HAVEN AREA RGNL (LWA) 3 S UTC-5(-4DT) N42°21.07' W86°15.34'

CHICAGO

666 B S4 FUEL 100LL, JET A NOTAM FILE LAN

L-281

RWY 04-22: H4801X75 (ASPH) S-12 MIRL 0.3% up NE

IAP

RWY 04: REIL. PAPI (P4L)—GA 3.5° TCH 33'. Trees.

RWY 22: REIL. PAPI (P4L)—GA 3.5° TCH 33'. Tree.

RWY 14-32: 3275X190 (TURF)

RWY 14: Thld dsplcd 963'. Trees. RWY 32: Thld dsplcd 762'. Tree.

AIRPORT REMARKS: Attended 1400-2200Z±. Deer on and invof arpt. Rwy 14 and Rwy 32 dsplcd thlds marked with three 3' yellow cones. MIRL Rwy 04-22 preset low ints; dusk-0400Z±; to increase ints and ACTIVATE REIL and PAPI Rwy 04 and Rwy 22—CTAF. After 0400Z± ACTIVATE CTAF.

WEATHER DATA SOURCES: AWOS-3 118.025 (269)637-7016.

COMMUNICATIONS: CTAF/UNICOM 122.8

PULLMAN RCO 122.1R, 112.1T (LANSING RADIO)

SOUTH BEND APP/DEP CON 118.55 (Sun-Fri 1030-0500Z±, Sat 1030-0445Z±, other times ctc

CHICAGO CENTER APP/DEP CON 128.5

GCO 121.725 (FLIGHT SERVICES)

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

PULLMAN (H) VOR/DME 112.1 PMM Chan 58 N42°27.96' W86°06.29' 224° 9.6 NM to fld. 640/00E.

SOUTHWEST MICHIGAN RGNL (See BENTON HARBOR)

## SPARTA

PAUL C. MILLER-SPARTA (8D4) 3 SE UTC-5(-4DT) N43°07.63' W85°40.70'

CHICAGO

775 B S4 FUEL 100LL, MOGAS NOTAM FILE LAN

L-281

RWY 07-25: H4033X75 (ASPH) S-24 MIRL

IAP

RWY 07: REIL. PAPI(P2L)—GA 3.5° TCH 22'. Trees.

RWY 25: REIL. PAPI(P2R)—GA 3.5° TCH 27'. Trees. 0.7% up W.

AIRPORT REMARKS: Attended irregularly. Powered parachute ops north side of rwy. Deer on and invof arpt. ACTIVATE MIRL Rwy 07-25 and PAPI Rwy 07-25—CTAF.

WEATHER DATA SOURCES: AWOS-A 132.95 (616) 887-2039. ASOS-A 122.8 (616) 887-2039.

COMMUNICATIONS: CTAF/UNICOM 122.8

® GRAND RAPIDS APP/DEP CON 124.6 (1030-0500Z±)

CHICAGO CENTER APP/DEP CON 128.5 (0500-1030Z±)

RADIO AIDS TO NAVIGATION: NOTAM FILE MKG.

MUSKEGON (L) VORTACW 115.2 MKG Chan 99 N43°10.16' W86°02.36' 100° 16.1 NM to fld. 659/1W.

HIWAS.

SPENC N42°13.20' W83°12.20' NOTAM FILE DTW.

DETROIT

NDB (LOM) 223 DM 272° 6.7 NM to Detroit Metropolitan Wayne Co.

A

STAMBAUGH (See IRON RIVER)

## STANWOOD

CAIN FLD (38C) 2 SE UTC-5(-4DT) N43°36.00' W85°29.59'

CHICAGO

889 S4 NOTAM FILE LAN

RWY 18-36: 3450X100 (TURF)

RWY 18: Thld dsplcd 486'. Trees. RWY 36: Thld dsplcd 384'. Tree.

AIRPORT REMARKS: Attended irregularly. Fuel avbl for emergencies only. Radio control acft activity on and invof arpt. Occasional deer activity on and invof arpt. Rwy 18-36 and dsplcd thlds marked with 3' yellow cones.

COMMUNICATIONS: CTAF 122.9

STURGIS N41°48.79' W85°26.03' NOTAM FILE IRS.

CHICAGO

NDB (MHW) 382 IRS at Kirsch Muni.

L-281

APP CRS	Rwy Idg	<b>4033</b>
<b>066°</b>	TDZE	<b>775</b>
	Apt Elev	<b>775</b>

**RNAV (GPS) RWY 7**

SPARTA / PAUL C. MILLER - SPARTA (8D4)

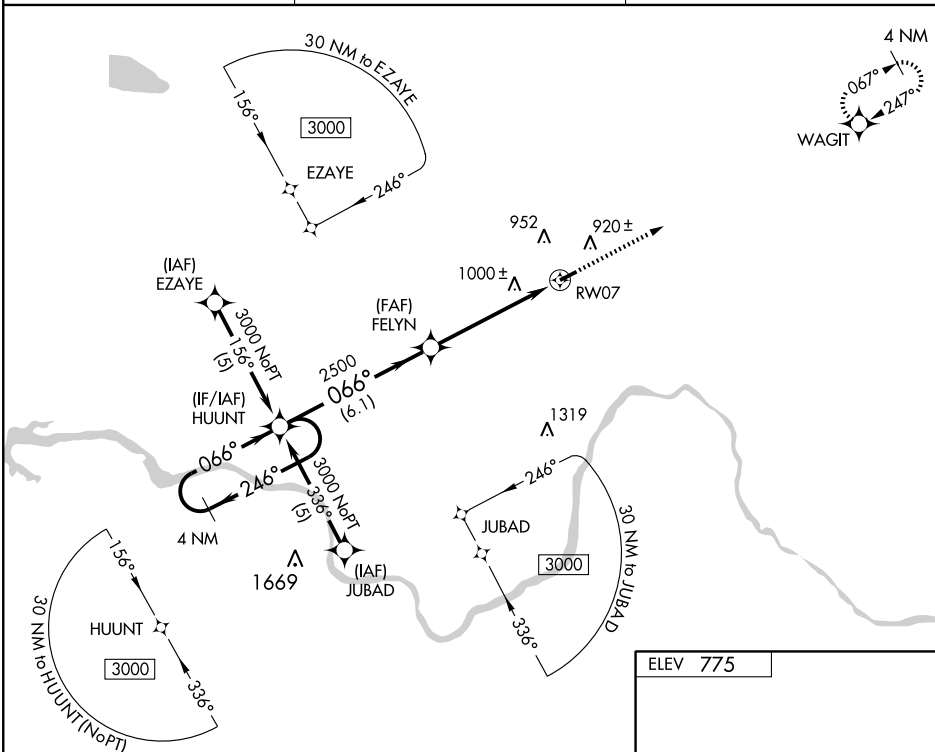
**▽** DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.  
**▲** When local altimeter setting not received, use Grand Rapids altimeter setting and increase all MDA 60 feet.

MISSED APPROACH: Climb to 3000  
 direct WAGIT and hold.

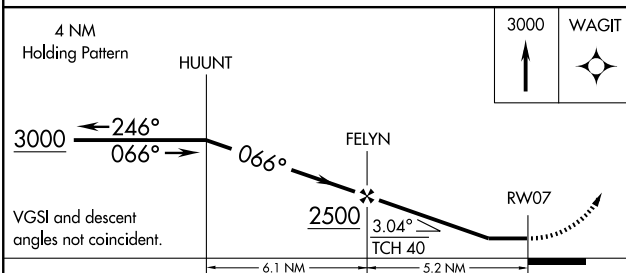
ASOS-A  
**122.8**

GRAND RAPIDS APP CON ★  
**124.6 257.6**

UNICOM  
**122.8 (CTAF) ①**

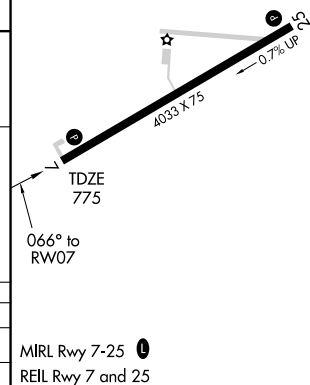


ELEV 775



VGSI and descent  
 angles not coincident.

CATEGORY	A	B	C	D
LNAV MDA	1340-1	565 (600-1)	NA	NA
CIRCLING	1340-1	565 (600-1)	NA	NA



MIRL Rwy 7-25 ①  
 REIL Rwy 7 and 25

APP CRS <b>247°</b>	Rwy Idg TDZE Apt Elev	<b>4033</b> <b>775</b> <b>775</b>
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**RNAV (GPS) RWY 25**

SPARTA / PAUL C. MILLER - SPARTA (8D4)

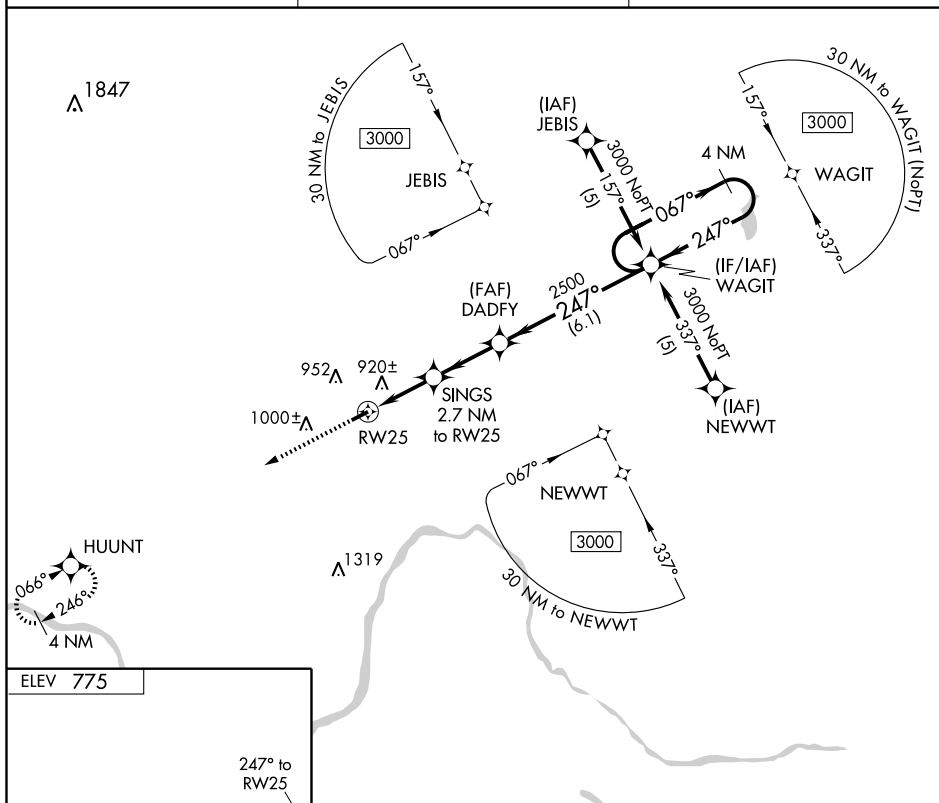
**▽** DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.  
**▲** When local altimeter setting not received, use Grand Rapids altimeter setting and increase all MDA 60 feet.

MISSED APPROACH: Climb to 3000 direct HUUNT and hold.

ASOS-A  
**122.8**

GRAND RAPIDS APP CON ★  
**124.6 257.6**

UNICOM  
**122.8 (CTAF) 0**



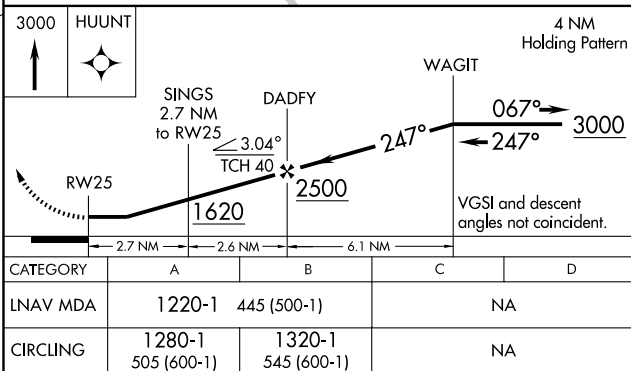
ELEV 775

247° to RW25

0.7% UP

TDZE 775

4033 X 75



MIRL Rwy 7-25 0  
REIL Rwy 7 and 25

VORTAC <b>115.2</b> Chan <b>99</b>	APP CRS <b>280°</b>	Rwy Idg TDZE Apt Elev <b>775</b>	<b>N/A</b> <b>N/A</b> <b>775</b>
--	------------------------	---	--

VOR-A

SPARTA / PAUL C. MILLER - SPARTA (8D4)

**V** When local altimeter setting not received, use Grand Rapids altimeter setting and increase all MDA 60 feet.


MISSED APPROACH: Climb to 2500 then right turn via heading 119° and MKG R-100 to EATUN INT/MKG 21 DME and hold.

ASOS-A  
**122.8**

GRAND RAPIDS APP CON ★  
**124.6 257.6**

UNICOM  
**122.8 (CTAF) 0**

△  
1847

MUSKEGON  
**115.2** MKG   
Chan **99**

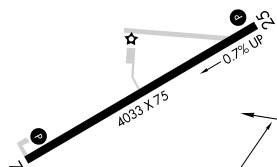
2500 to EATUN  
100°  
(21)

MSA MKG 25 NM

2900

ELEV **775**

GRAND RAPIDS  
**115.95** GRR   
Chan **106 (Y)**



280° 4.7 NM  
from FAF

MIRL Rwy 7-25 **0**  
REIL Rwy 7 and 25

FAF to MAP 4.7 NM

Knots	60	90	120	150	180
Min:Sec	4:42	3:08	2:21	1:53	1:34

2500

HDG 119°  
MKG R-100  
**115.2**

EATUN  
INT

EATUN INT  
MKG **21**

Remain  
within 10 NM

MAHXY  
MKG **16.3**

100°

280°

2500

4.7 NM

CATEGORY

A

B

C

D

CIRCLING

1360-1 585 (600-1)

NA

## ST IGNACE

**MACKINAC CO** (83D) 2 NW UTC-5(-4DT) N45°53.49' W84°44.29'

LAKE HURON

624 B S4 FUEL 100LL NOTAM FILE GRB

L-31B

RWY 07-25: H3800X75 (CONC) S-24 MRL 0.4% up SW

IAP

RWY 07: REIL. PAPI(P4L)—GA 4.0° TCH 33'. Trees.

RWY 25: REIL. PAPI(P4L)—GA 3.0° TCH 21'. Road.

**AIRPORT REMARKS:** Attended dawn-dusk. After hours 906-643-7161 (manager residence). Deer and birds on and invof arpt. ACTIVATE MRL Rwy 07-25 and PAPI Rwy 07 and 25 and REIL Rwy 07 and 25 and ramp lgts—CTAF.

**COMMUNICATIONS:** CTAF/UNICOM 122.7

**MACKINAC ISLAND RCD** 122.35 (GREEN BAY RADIO)

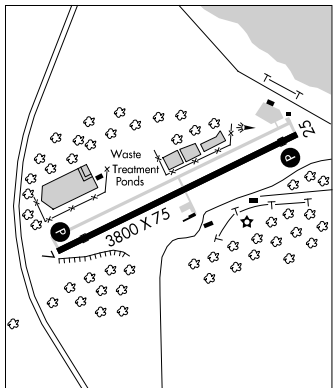
⑧ **MINNEAPOLIS CENTER APP/DEP CON** 134.6

**RADIO AIDS TO NAVIGATION:** NOTAM FILE PLN.

**PELLSTON (L) VORTACW** 111.8 PLN Chan 55 N45°37.84'

W84°39.85' 355° 16.0 NM to fld. 840/6W. **HIWAS.**

**COMM/NAV/WEATHER REMARKS:** Mackinac Island (MCD) AWOS 118.27 can be received on the ground.



**ST JAMES** N45°41.60' W85°33.52' NOTAM FILE SJX.

GREEN BAY

**NDB (MHW)** 382 SJX at Beaver Island. Unmonitored.

L-31B

## ST JOHNS

**ARCHER MEML FLD** (2S3) 7 SE UTC-5(4DT) N42°54.42' W84°28.33'

DETROIT

794 TPA-1600(806) NOTAM FILE LAN

RWY 17-35: 2496X110 (TURF)

RWY 35: Thld dspcd 1145'.

**AIRPORT REMARKS:** Attended May-Nov irregularly. No snow removal. Rwy 17 thld may be obstructed by 8' corn during growing season. Rwy 17-35 marked with 3' yellow cones.

**COMMUNICATIONS:** CTAF 122.9

**GLOWACKI** (97G) 2 W UTC-5(4DT) N43°00.00' W84°35.75'

DETROIT

775 NOTAM FILE LAN

RWY 09-27: 1528X100 (TURF)

RWY 09: Trees. RWY 27: Building.

**AIRPORT REMARKS:** Attended irregularly. 15' tree N side of rwy on rwy edge, 132' E of Rwy 09. Rwy 27 terrain slopes downward E to W; Rwy soft in spring. Radio control and ultralight acft ops on arpt. Rwy 09-27 marked with 3' yellow cones.

**COMMUNICATIONS:** CTAF 122.9

**RANDOLPH'S LANDING AREA** (61G) 7 NE UTC-5(-4DT) N43°06.75' W84°31.25'

DETROIT

700 NOTAM FILE LAN

RWY 05-23: 2175X100 (TURF)

RWY 05: Thld dspcd 767'. Road.

**AIRPORT REMARKS:** Attended irregularly. Deer on and invof arpt. Rwy 23 3' fence L side 65' from centerline. Rwy 05-23 and dspcd thlds marked with yellow tires; Rwy 05 dspcd thld marked with 6 yellow tires 3 each side.

**COMMUNICATIONS:** CTAF 122.9

**SCHIFFER ACRES** (3S5) 4 E UTC-5(-4DT) N43°02.15' W84°26.03'

DETROIT

735 S4 NOTAM FILE LAN

RWY 07-25: 2777X120 (TURF)

RWY 07: Rgt tfc. Trees. RWY 25: Thld dspcd 798'. Trees.

**AIRPORT REMARKS:** Attended irregularly. Power plant repairs are for emerg use only. Extensive summer agricultural ops. Deer and turkeys on and invof rwy. Rwy 07-25 LIRL not for public use. Rwy 25 displaced thld marked by 3 yellow tires each side of rwy. Rwy defined by mowing.

**COMMUNICATIONS:** CTAF 122.9



APP CRS <b>074°</b>	Rwy Idg	<b>3800</b>
	TDZE	<b>623</b>
	Apt Elev	<b>623</b>

**RNAV (GPS) RWY 7**

ST IGNACE / MACKINAC COUNTY (83D)

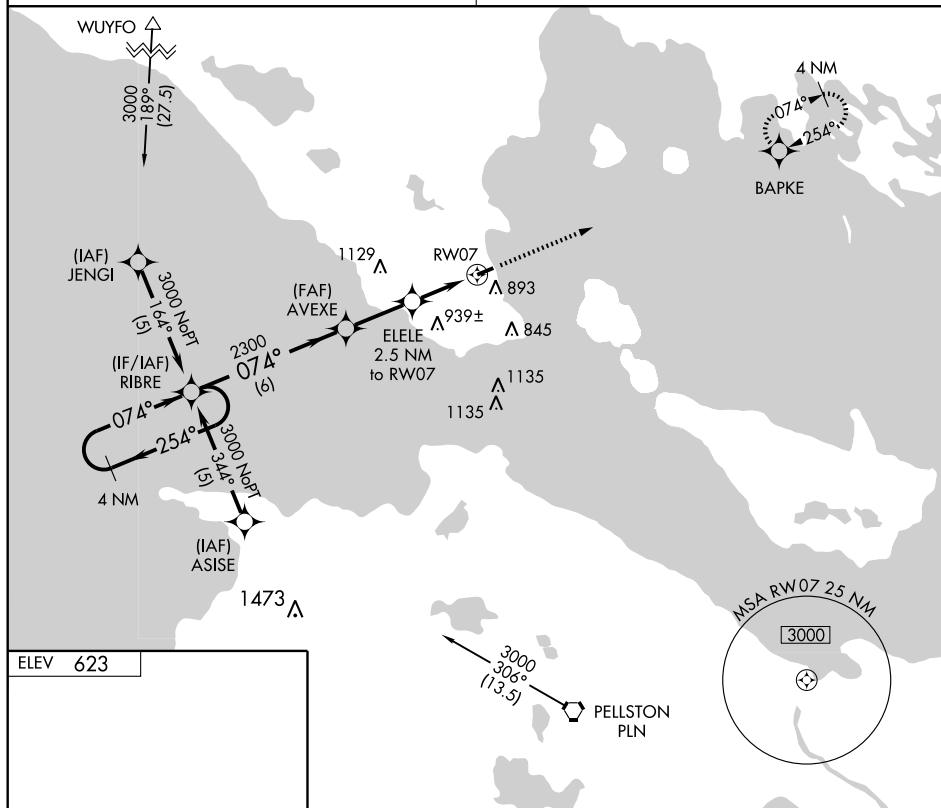


Use Mackinac Island altimeter setting.  
GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.  
Circling NA at night south of Rwy 7-25.

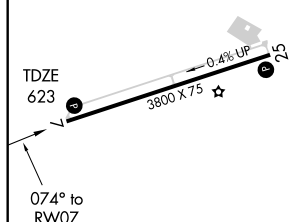
MISSED APPROACH: Climb to 3000  
direct BAPKE WP and hold.

MINNEAPOLIS CENTER  
**134.6 354.05**

UNICOM  
**122.7 (CTAF) 0**

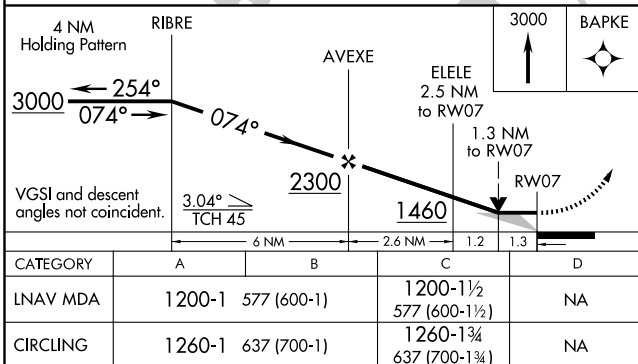


ELEV 623



MIRL Rwy 7-25 0

REIL Rws 7 and 25 0



ST IGNACE, MICHIGAN  
Orig-A 07018

45°53'N - 84°44'W

ST IGNACE / MACKINAC COUNTY (83D)

**RNAV (GPS) RWY 7**

APP CRS <b>254°</b>	Rwy Idg <b>623</b>
	Apt Elev <b>623</b>

# RNAV (GPS) RWY 25

ST IGNACE / MACKINAC COUNTY (83D)

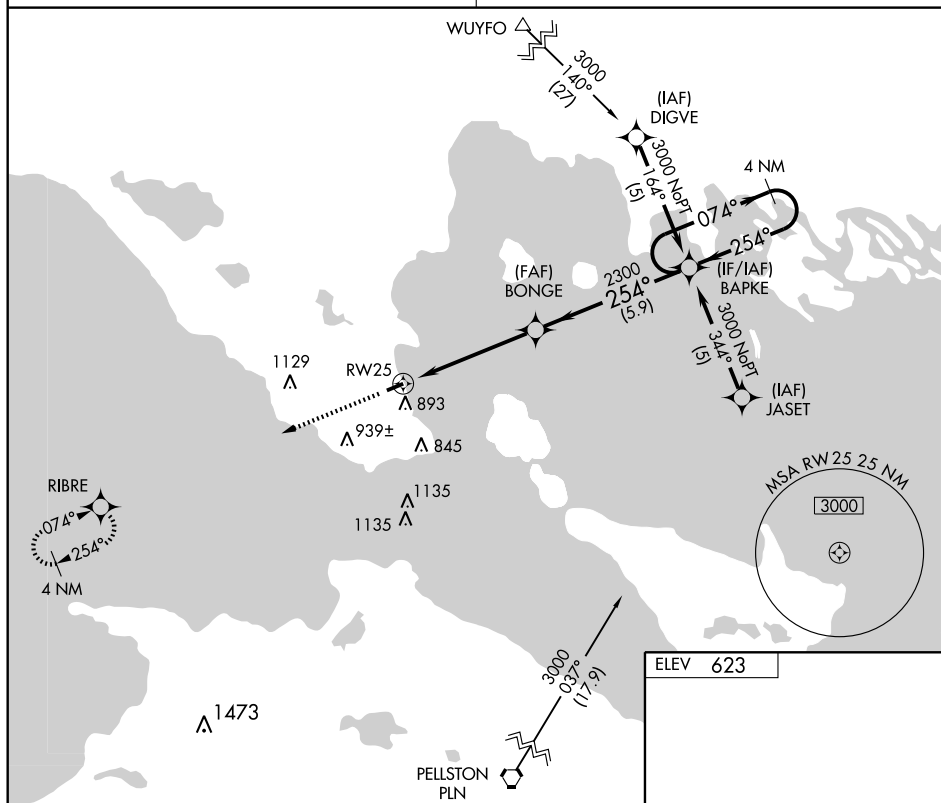


Use Mackinac Island altimeter setting.  
GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.  
Circling NA at night south of RWY 7-25.

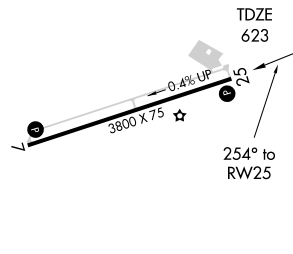
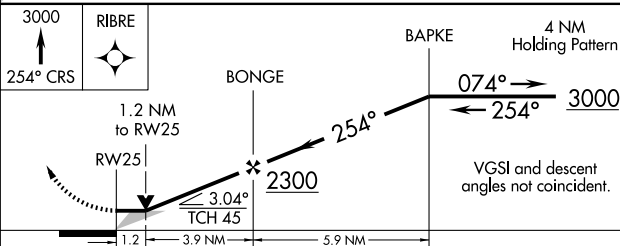
MISSED APPROACH: Climb to 3000 via  
254° course to RIBRE WP and hold.

MINNEAPOLIS CENTER  
**134.6 354.05**

UNICOM  
**122.7 (CTAF)**



ELEV **623**



CATEGORY	A	B	C	D
RNAV MDA	1020-1	397 (400-1)		NA
CIRCLING	1260-1	637 (700-1)	1260-1 3/4 637 (700-1 3/4)	NA

MIRL Rwy 7-25  
REIL Rwy 7 and 25

## STURGIS

KIRSCH MUNI (IRS) 2 NW UTC-5(-4DT) N41°48.80' W85°26.34'

924 B S4 FUEL 100LL, JET A1 + OX 4 TPA-1924(1000) NOTAM FILE IRS

CHICAGO  
H-5E, 10F, L-281  
IAP

RWY 18-36: H5200X100 (ASPH) S-47, D-57.5 2D-90 MIRL

RWY 18: REIL. PAPI(P4L)-GA 3.0° TCH 27'. Trees.

RWY 36: REIL. PAPI(P4L)-GA 3.0° TCH 25'. Trees.

RWY 06-24: H3451X75 (ASPH) S-19, D-25, DT-58 MIRL  
0.3% up NE.

RWY 06: Trees.

RWY 24: REIL. PAPI(P2L)-GA 4.0° TCH 22'. Trees.

AIRPORT REMARKS: Attended 1300Z±-dusk. Rwy 18-36 MIRL OTS  
indef. ACTIVATE MIRL Rwy 06-24 and Rwy 18-36, REIL Rwy 18  
and Rwy 24, PAPI Rwy 24, Rwy 18, and Rwy 36-CTAF.

WEATHER DATA SOURCES: AWOS-3 121.325 (269) 659-8715.

COMMUNICATIONS: CTAF/UNICOM 123.05

® KALAMAZOO APP/DEP CON 121.2 (1100-0400Z±)

KALAMAZOO CLNC DEL 133.55

® CHICAGO CENTER APP/DEP CON 127.55 (0400-1100Z±)

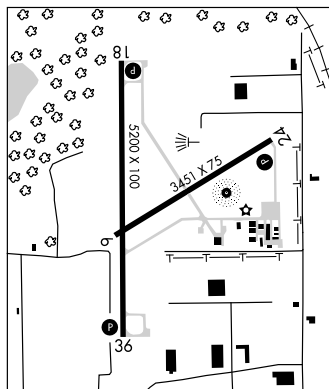
RADIO AIDS TO NAVIGATION: NOTAM FILE AZO.

KALAMAZOO (L) VOR/DME 109.0 AZO Chan 27 N42°14.22'

W85°33.19' 170° 25.9 NM to fld. 870/1W.

STURGIS NDB (MHW) 382 IRS N41°48.79' W85°26.03' at fld.

NOTAM FILE IRS.



SUGAR LOAF RESORT (See TRAVERSE CITY)

## SUNFIELD

HIRAM CURE (C43) 2 NE UTC-5(-4DT) N42°46.20' W84°57.90'

DETROIT

853 NOTAM FILE LAN

RWY 09-27: 2314X100 (TURF)

RWY 09: Tree.

AIRPORT REMARKS: Attended irregularly. Arpt CLOSED Dec thru Mar and when snow covered. Rwy 09-27 soft when  
wet. Deer invof rwy. Crops adjacent to rwy. Rwy 09-27 marked with 3' yellow cones.

COMMUNICATIONS: CTAF 122.9

SUOMI N46°15.71' W87°24.97' NOTAM FILE SAW.

GREEN BAY

NDB (LOM) 410 SO 013° 5.6 NM to Sawyer Intl.

TACKABERRY (See AVOCA)

## TECUMSEH

MEYERS-DIVER'S (3TE) 2 N UTC-5(-4DT) N42°01.51' W83°56.35'

DETROIT

815 B S3 FUEL 100LL NOTAM FILE LAN

COPTER

RWY 18-36: H2660X75 (ASPH) S-6 LIRL 0.6% up N

L-28J

RWY 18: Thld dsplcd 780'. Trees.

RWY 36: Thld dsplcd 500'. Trees. Rgt tfc.

IAP

RWY 09-27: 1820X100 (TURF)

RWY 09: Trees.

RWY 27: Post.

AIRPORT REMARKS: Attended 1300-2300Z±. Fuel avbl Mon-Sat 1300-2230Z±. Parachute Jumping. Skydiving activity.

Rwy 18-36 pavement cracking. Rwy 09-27 not plowed after winter storms. Maintenance for Meyers acft only.

Rwy 18-36 acft Ind/tkof adjacent W of asph rwy. Area not marked to delineate area being used. Rwy 09-27  
marked with tires; Rwy 09 dsplcd thld marked with three tires each side. ACTIVATE LIRL Rwy 18-36-CTAF.

COMMUNICATIONS: CTAF 122.9

® DETROIT APP/DEP CON 118.95

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

CARLETON (H) VORTAC 115.7 CRL Chan 104 N42°02.88' W83°27.45' 270° 21.6 NM to fld. 629/3W.

HIWAS.



NDB IRS <b>382</b>	APP CRS <b>236°</b>	Rwy Idg TDZE Apt Elev	<b>3451</b> <b>924</b> <b>924</b>
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**NDB RWY 24**

STURGIS/KIRSCH MUNI (IRS)

When local altimeter setting not received, use Three Rivers altimeter setting and increase all MDA 40 feet. Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 2500 then right turn direct IRS NDB and hold.

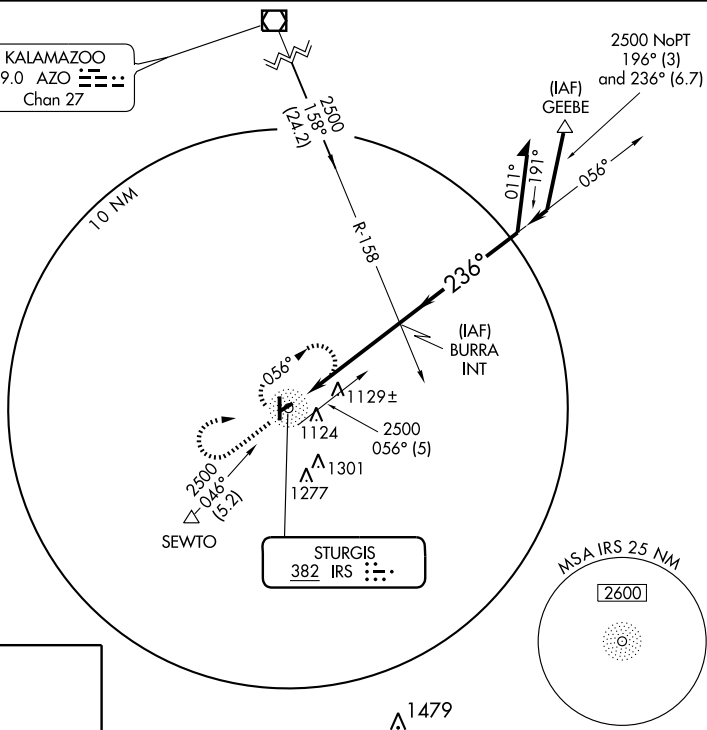
AWOS-3  
**121.325**

KALAMAZOO APP CON ★  
**121.2 340.9**

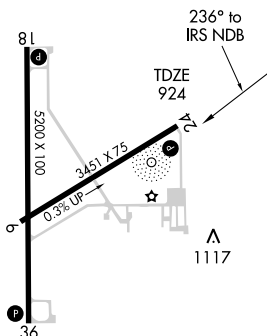
CINC DEL  
**133.55**

UNICOM  
**123.05 (CTAF)**

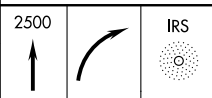
KALAMAZOO  
109.0 AZO  
Chan 27



ELEV 924



REIL Rwy 18, 24 and 36  
MIRL Rwy 6-24 and 18-36



NDB

BURRA INT

Remain  
within 10 NM

0.2

4.8 NM

CATEGORY	A	B	C	D
S-24	1480-1	556 (600-1)	1480-1½ 556 (600-1½)	1480-1¾ 556 (600-1¾)
CIRCLING	1480-1	556 (600-1)	1480-1½ 556 (600-1½)	1620-2¼ 696 (700-2¼)

APP CRS	Rwy Idg	<b>5200</b>
<b>184°</b>	TDZE	<b>914</b>
	Apt Elev	<b>924</b>

**RNAV (GPS) RWY 18**

STURGIS/KIRSCH MUNI (IRS)

**▼** DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.  
**▲** When local altimeter setting not received, use Three Rivers altimeter setting and increase all MDAs 40 feet and LNAV Cat C and D visibility ¼ mile.

**MISSED APPROACH:** Climb to 3000 direct CAVUP and via 096° track to BRYTO and hold.

AWOS-3  
**121.325**

KALAMAZOO APP CON ★  
**121.2 340.9**

CINC DEL  
**133.55**

UNICOM  
**123.05 (CTAF) ①**

(IAF) RESGY

Procedure NA for arrivals at RESGY via V285 northbound, and via V100 westbound.

Procedure NA for arrivals at GEEBE via V10 eastbound.

(IF) UKANE

(IAF) TEVUJ

GEEBE

▲ 1461

2500  
184°  
(6.2)2500  
274°  
(5)2500  
289°  
(5.4)

(FAF) ZUGDA

1133 ±

RW18

▲ 1124

▲ 1301

▲ 1277

CAVUP

096°

BRYTO

096°

276°

4 NM

MSA RW18 25 NM

2500

ELEV 924

TDZE 914

184° to RW18

5200 X 100

3451 X 75

0.3% UP

▲ 1117

REIL Rwy 18, 24 and 36 ①  
MIRL Rwy 6-24 and 18-36 ①

UKANE

ZUGDA

3000

CAVUP

tr 096°

BRYTO

2500  
Procedure Turn NA

2500  
184°

2500  
184°

RW18

VGSI and descent angles not coincident.

3.05°  
TCH 40

6.2 NM

4.8 NM

CATEGORY

A

B

C

D

LNAV MDA

1400-1

486 (500-1)

1400-1¼

1400-1½

CIRCLING

1440-1

516 (600-1)

1440-1½

1620-2¼

516 (600-1½)

696 (700-2¼)

WAAS CH <b>42915</b> <b>W36A</b>	APP CRS <b>004°</b>	Rwy Idg TDZE Apt Elev	<b>5200</b> <b>915</b> <b>924</b>
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**RNAV (GPS) RWY 36**

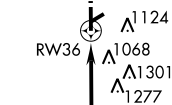
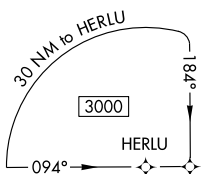
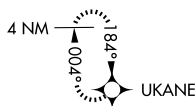
STURGIS/KIRSCH MUNI (IRS)

▼ For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Three Rivers altimeter setting and increase all DA/MDA 40 feet, increase LNAV/VNAV all Cats and LNAV Cat C/D visibility ¼ mile. VDP NA when using Three Rivers altimeter setting. Baro-VNAV NA when using Three Rivers altimeter setting.

MISSED APPROACH:  
Climb to 2500 direct  
UKANE and hold.

AWOS-3 <b>121.325</b>	KALAMAZOO APP CON ★ <b>121.2 340.9</b>	CLNC DEL <b>133.55</b>	UNICOM <b>123.05</b> (CTAF) <b>0</b>
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## MISSED APCH FIX



(FAF) NUHTO

2500

(6:1)

(IAF) HERLU

3000 NoPT

(5)

(IF/IAF) JETKI

004°

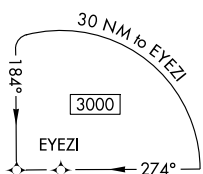
3000 NoPT

(5)

(IAF) EYEZI

274°

1479



ELEV 924

4 NM Holding Pattern

JETKI

VGS1 and RNAV glidepath not coincident.

2500

UKANE

3000

184°

004°

004°

2500

6.1 NM

3.1 NM

1.7 NM

RW36

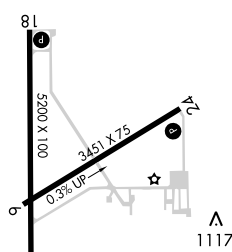
GS 3.00°

TCH 40

\*1.7 NM to RW36

\*RNAV only.

CATEGORY	A	B	C	D
LPV DA	1178-1 263 (300-1)			
LNAV/VNAV DA	1354-1½ 439 (500-1½)			
LNAV MDA	1480-1	565 (600-1)	1480-1½ 565 (600-1½)	1480-1¾ 565 (600-1¾)
CIRCLING	1480-1	556 (600-1)	1480-1½ 556 (600-1½)	1620-2¼ 696 (700-1¼)



TDZE 915

REIL Rwy 18, 24 and 36 **0**  
MIRL Rwy 6-24 and 18-36 **0**

## STURGIS

KIRSCH MUNI (IRS) 2 NW UTC-5(-4DT) N41°48.80' W85°26.34'

924 B S4 FUEL 100LL, JET A1 + OX 4 TPA-1924(1000) NOTAM FILE IRS

RWY 18-36: H5200X100 (ASPH) S-47, D-57.5 2D-90 MIRL

RWY 18: REIL. PAPI(P4L)-GA 3.0° TCH 27'. Trees.

RWY 36: REIL. PAPI(P4L)-GA 3.0° TCH 25'. Trees.

RWY 06-24: H3451X75 (ASPH) S-19, D-25, DT-58 MIRL  
0.3% up NE.

RWY 06: Trees.

RWY 24: REIL. PAPI(P2L)-GA 4.0° TCH 22'. Trees.

AIRPORT REMARKS: Attended 1300Z±-dusk. Rwy 18-36 MIRL OTS  
indef. ACTIVATE MIRL Rwy 06-24 and Rwy 18-36, REIL Rwy 18  
and Rwy 24, PAPI Rwy 24, Rwy 18, and Rwy 36-CTAF.

WEATHER DATA SOURCES: AWOS-3 121.325 (269) 659-8715.

COMMUNICATIONS: CTAF/UNICOM 123.05

Ⓡ KALAMAZOO APP/DEP CON 121.2 (1100-0400Z±)

KALAMAZOO CLNC DEL 133.55

Ⓡ CHICAGO CENTER APP/DEP CON 127.55 (0400-1100Z±)

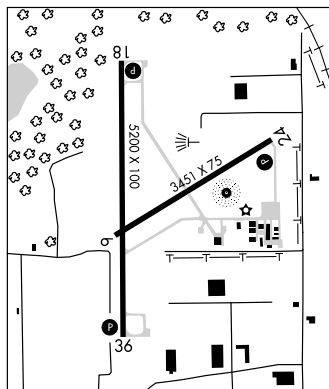
RADIO AIDS TO NAVIGATION: NOTAM FILE AZO.

KALAMAZOO (L) VOR/DME 109.0 AZO Chan 27 N42°14.22'

W85°33.19' 170° 25.9 NM to fld. 870/1W.

STURGIS NDB (MHW) 382 IRS N41°48.79' W85°26.03' at fld.

NOTAM FILE IRS.



CHICAGO

H-5E, 10F, L-281

IAP

SUGAR LOAF RESORT (See TRAVERSE CITY)

## SUNFIELD

HIRAM CURE (C43) 2 NE UTC-5(-4DT) N42°46.20' W84°57.90'

DETROIT

853 NOTAM FILE LAN

RWY 09-27: 2314X100 (TURF)

RWY 09: Tree.

AIRPORT REMARKS: Attended irregularly. Arpt CLOSED Dec thru Mar and when snow covered. Rwy 09-27 soft when  
wet. Deer invof rwy. Crops adjacent to rwy. Rwy 09-27 marked with 3' yellow cones.

COMMUNICATIONS: CTAF 122.9

SUOMI N46°15.71' W87°24.97' NOTAM FILE SAW.

GREEN BAY

NDB (LOM) 410 SO 013° 5.6 NM to Sawyer Intl.

TACKABERRY (See AVOCA)

## TECUMSEH

MEYERS-DIVER'S (3TE) 2 N UTC-5(-4DT) N42°01.51' W83°56.35'

DETROIT

815 B S3 FUEL 100LL NOTAM FILE LAN

RWY 18-36: H2660X75 (ASPH) S-6 LIRL 0.6% up N

RWY 18: Thld dspld 780'. Trees.

RWY 36: Thld dspld 500'. Trees. Rgt tfc.

RWY 09-27: 1820X100 (TURF)

RWY 09: Trees.

RWY 27: Post.

AIRPORT REMARKS: Attended 1300-2300Z±. Fuel avbl Mon-Sat 1300-2230Z±. Parachute Jumping. Skydiving activity.

Rwy 18-36 pavement cracking. Rwy 09-27 not plowed after winter storms. Maintenance for Meyers acft only.

Rwy 18-36 acft Ind/tkof adjacent W of asph rwy. Area not marked to delineate area being used. Rwy 09-27  
marked with tires; Rwy 09 dspld thld marked with three tires each side. ACTIVATE LIRL Rwy 18-36-CTAF.

COMMUNICATIONS: CTAF 122.9

Ⓡ DETROIT APP/DEP CON 118.95

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

CARLETON (H) VORTAC 115.7 CRL Chan 104 N42°02.88' W83°27.45' 270° 21.6 NM to fld. 629/3W.

HIWAS.

COPTER

L-28J

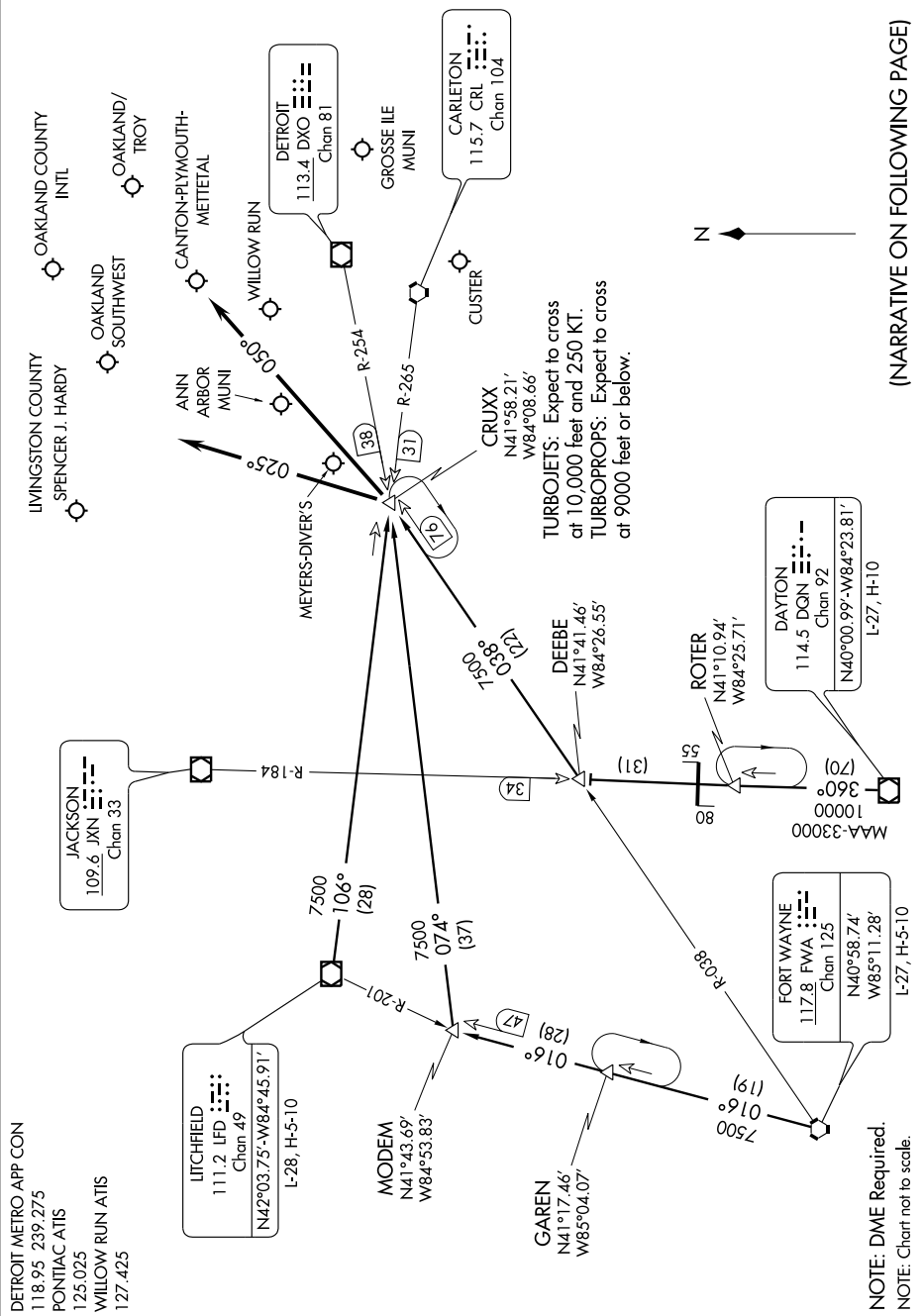
IAP



## CRUXX FOUR ARRIVAL

DETROIT, MICHIGAN

EC-1, 23 SEP 2010 to 21 OCT 2010



(NARRATIVE ON FOLLOWING PAGE)

EC-1, 23 SEP 2010 to 21 OCT 2010

## CRUXX FOUR ARRIVAL (CRUXX.CRUX4)

DETROIT, MICHIGAN

## ARRIVAL DESCRIPTION

DAYTON TRANSITION (DQN.CRUX4): From over DQN VOR/DME via DQN R-360 and JXN R-184 to DEEBE INT and FWA R-038 to CRUXX INT. Thence . . . .

FORT WAYNE TRANSITION (FWA.CRUX4): From over FWA VORTAC via FWA R-016 to MODEM INT and DXO R-254 to CRUXX INT. Thence . . . .

LITCHFIELD TRANSITION (LFD.CRUX4): From over LFD VORTAC via LFD R-106 to CRUXX INT. Thence . . . .

. . . . Aircraft landing Y47, PTK, 0MI7, ØZW, ONZ, 1D2, TTF, VLL: From over CRUXX INT via 025° heading.

. . . . Aircraft landing YIP or ARB: From over CRUXX INT via 050° heading. Expect radar vector to final approach course.

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010

(SPRTN.SPRTN3) 10210

ST-118 (FAA)

## SPRTN THREE ARRIVAL

DETROIT, MICHIGAN

DETROIT APP CON

127.5 239.275

WILLOW RUN ATIS 127.425

PONTIAC ATIS 125.025

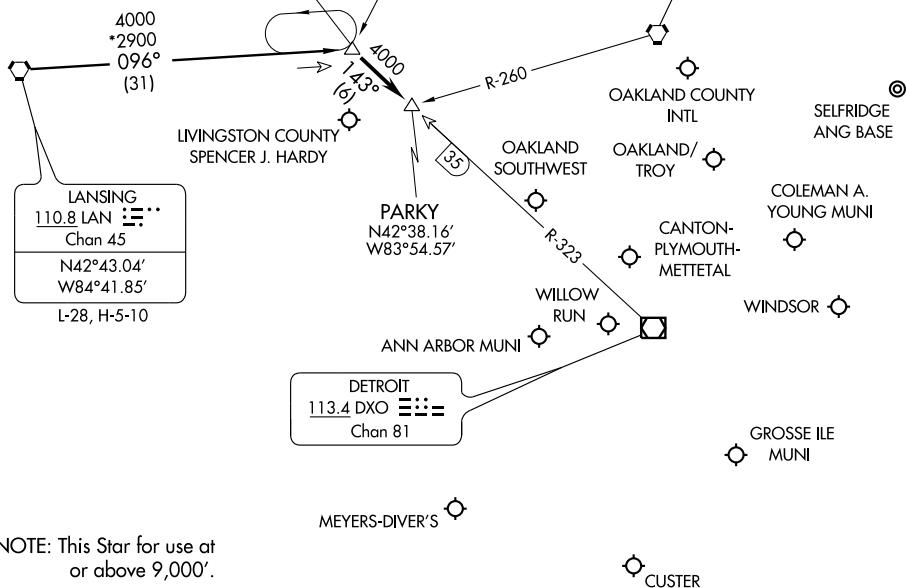
COLEMAN A. YOUNG ATIS 124.875

WINDSOR ATIS 134.5

SELFIDGE ATIS 125.325 270.1

SPRTN

N42°42.52'-W84°00.23'

VERTICAL NAVIGATION  
PLANNING INFORMATIONTURBOJETS/TURBOPROPS:  
Expect clearance to cross at  
9000'.NOTE: This Star for use at  
or above 9,000'.

NOTE: Chart not to scale.

EC-1, 23 SEP 2010 to 21 OCT 2010

LANSING TRANSITION (LAN.SPRTN3): From over LAN VORTAC via LAN R-096  
to SPRTN INT. Thence . . . .. . . . Aircraft landing: DET, PTK, VLL, D98, MTC, ARB, YIP, ONZ,  
1D2, TTF, Y47, 36MI, OZW, 3TE, YQG: From over SPRTN INT via DXO R-323  
to PARKY INT. Thence . . . .

. . . . Expect radar vectors to final approach course.



## SPRTN THREE ARRIVAL

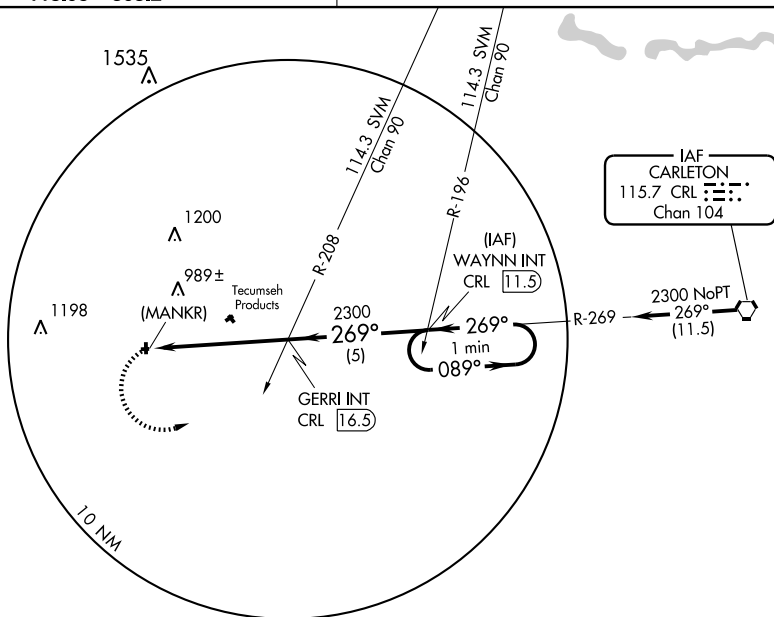
DETROIT, MICHIGAN

(SPRTN.SPRTN3) 10210

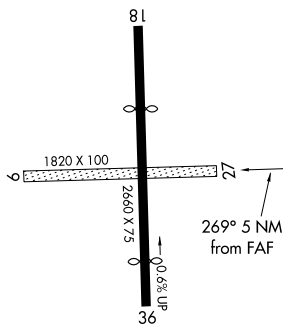
VORTAC CRL <b>115.7</b> Chan <b>104</b>	APP CRS <b>269°</b>	Rwy Idg TDZE Apt Elev	<b>N/A</b> <b>N/A</b> <b>815</b>
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## VOR or GPS-A

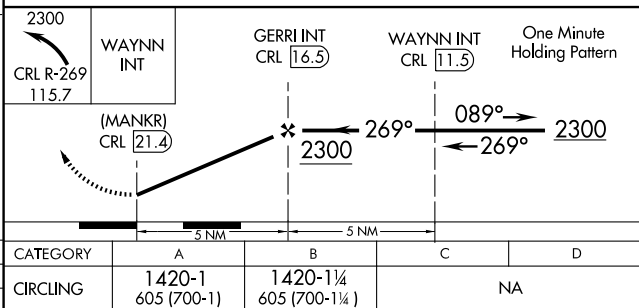
  Use Detroit Willow Run altimeter setting.	MISSED APPROACH: Climbing left turn to 2300 via CRL R-269 to WAYNN 11.5 DME and hold.
DETROIT METROPOLITAN WAYNE COUNTY APP CON <b>118.95 363.2</b>	CTAF <b>0</b> <b>122.9</b>



ELEV 815	Rwy 18 ldg 1880'
	Rwy 36 ldg 2160'

LIRL Rwy 18-36 **L**

FAF to MAP 5 NM					
Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40



TECUMSEH, MICHIGAN  
Amdt 7A 06MAY10

TECUMSEH/MEYERS-DIVERS (3TE)

42°02'N - 83°56'W

VOR or GPS-A

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1. 23 SEP 2010 to 21 OCT 2010

**MERILLAT** (34G) 3 SE UTC-5(-4DT) N41°58.50' W83°55.51'

**DETROIT  
COPTER**

820 B S4 FUEL 100LL NOTAM FILE LAN

RWY 18-36: 3608X100 (TURF) LIRL

RWY 18: Thld dspcd 261'. Fence.

RWY 36: Thld dplcd 486'. Fence.

**AIRPORT REMARKS:** Attended 1400-2200Z†. Ultralight activity on and invof arpt. Rwy 18-36 opposite rwy not visible from thld. Rwy 18-36 LIRL not for public use. Rwy 18-36 marked with cones; dspcd thld marked with three 3' yellow cones each side. ACTIVATE rotating bcu—CTAF.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

**VAN CAMP'S HELIPORT** (2T7) 5 NE UTC-5(-4DT) N42°01.15' W83°50.92'

**DETROIT  
COPTER**

740 NOTAM FILE LAN

HELIPAD H1: 90X50 (TURF)

**HELIPORT REMARKS:** Attended irregularly. Helipad H1 marked with cones. 35' tree 102' from heliport at 180°, apch ratio 2:1. 60' tree 80' from heliport at 270° apch ratio 2:1.

**COMMUNICATIONS:** CTAF 122.9

**THOMPSONVILLE** (7Y2) 2 W UTC-5(-4DT) N44°31.00' W85°58.51'

**GREEN BAY**

793 B NOTAM FILE LAN

RWY 09-27: H2900X75 (ASPH) D-12.5 LIRL

RWY 09: Thld dspcd 50'. Road. Rgt tfc.

RWY 27: PAPI(P2L)—GA 4.0° TCH 20'. Trees.

RWY 17-35: H2475X150 (TURF)

RWY 17: Thld dspcd 1220'. Trees.

RWY 35: Thld dspcd 1100'. Trees. Rgt tfc.

**AIRPORT REMARKS:** Unattended. Rwy 17-35 CLOSED Nov thru Mar and when snow covered. Rwy not plowed. Rwy 17-35 surface rough. +450' unlighted ski hill ½ mile west of arpt. Radio controlled model acft, ultralight and glider activity. Arpt rotating bcu on ski hill 450' above arpt elevation 1.0 miles northwest. ACTIVATE LIRL Rwy 09-27 and PAPI Rwy 27—CTAF. Rwy 17-35 and dspcd thlds marked with 3' yellow cones.

**COMMUNICATIONS:** CTAF 122.9

**THREE RIVERS MUNI DR HAINES** (HAI) 2 NE UTC-5(-4DT) N41°57.59' W85°35.60'

**CHICAGO  
L-2B1  
IAP**

824 B S4 FUEL 100LL, JET A TPA-1824(1000) NOTAM FILE LAN

RWY 09-27: H4000X75 (ASPH) S-26, D-30 MIRL

RWY 09: REIL. PAPI(P4L)—GA 3.5° TCH 25'.

RWY 27: REIL. PAPI(P4L)—GA 3.5° TCH 29'. Trees.

RWY 05-23: H2729X60 (ASPH) S-16 MIRL

RWY 05: Road.

RWY 23: Road.

**AIRPORT REMARKS:** Attended 1300Z†-dusk. Rwy 05-23 PAEW. Snow plowing second priority, call to confirm conditions. Rwy 05 vertical clnc over road waived by FAA (10/06/2009) ALP apvl letter. Possibility of crop irrigation equipment ops in NE apch to Rwy 23. Radio controlled airplanes opr S of apch end Rwy 27. MIRL Rwy 09-27 and Rwy 05-23 and PAPI Rwy 09 and Rwy 27 and REIL Rwy 09 and Rwy 27—CTAF.

**WEATHER DATA SOURCES:** AWOS-3 119.975 (269) 273-6705.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

Ⓡ KALAMAZOO APP/DEP CON 121.2 (1100-0400Z†)

Ⓡ CHICAGO CENTER APP/DEP CON 127.55 (0400-1100Z†)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE AZO.

KALAMAZOO (L) VOR/DME 109.0 AZO Chan 27 N42°14.22' W85°33.19' 187° 16.7 NM to fld. 870/1W.

NDB (MHW) 407 HAI N41°57.50' W85°35.50' on fld. NOTAM FILE LAN. OTS indef.

**TOLEDO SUBURBAN** (See LAMBERTVILLE)

## TOPINABEE

**PBEAAYE** (Y3Ø) 3 NE UTC-5(-4DT) N45°31.87' W84°33.42'

**LAKE HURON**

690 NOTAM FILE LAN

RWY 01-19: 2470X90 (TURF)

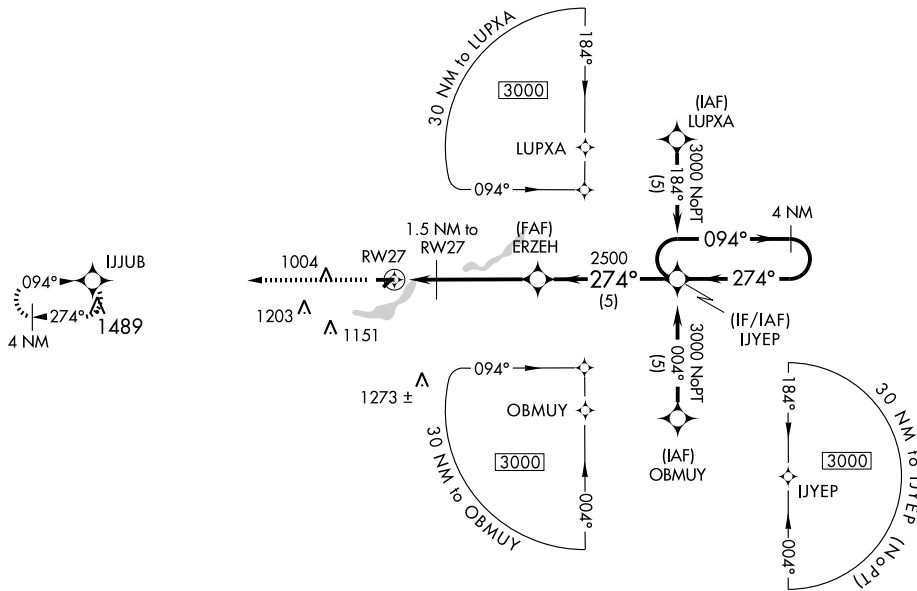
RWY 01: Thld dspcd 450'. Trees.

RWY 19: Thld dspcd 800'. Trees.

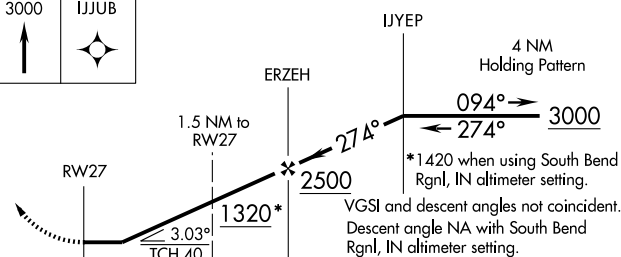
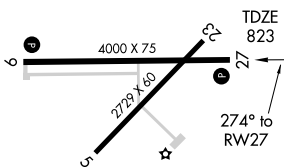
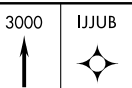
**AIRPORT REMARKS:** Attended irregularly. Deer and birds invof arpt. Winter ops skis only. Trees in primary sfc; all quadrants. Rwy 01-19 rwy sfc rolling terrain, rough. Rwy 01-19 and dspcd thlds marked with cones. +60' windsock located at north end.

**COMMUNICATIONS:** CTAF 122.9

**TORCHPORT** (See EASTPORT)

APP CRS  
**274°**Rwy Idg **4000**  
TDZE **823**  
Apt Elev **824****RNAV (GPS) RWY 27**  
THREE RIVERS MUNI DR. HAINES (HAI)Obtain local altimeter setting on CTAF; when not received, use South Bend altimeter setting.  
GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.MISSED APPROACH: Climb to 3000  
direct IJJUB WP and hold.AWOS-3  
**119.975**KALAMAZOO APP CON ★  
**121.2 340.9**UNICOM  
**122.8 (CTAF) ①**

ELEV 824



CATEGORY	A	B	C	D
RNAV MDA	1200-1 377 (400-1)		1200-1½ 377 (400-1½)	NA
CIRCLING	1260-1 436 (500-1)		1420-1¾ 596 (600-1¾)	NA
SOUTH BEND RGNL, IN ALTIMETER SETTING MINIMUMS				
RNAV MDA	1360-1 537 (600-1)		1360-1½ 537 (600-1½)	NA
CIRCLING	1420-1 596 (600-1)		1560-2 736 (800-2)	NA

REIL Rwy 9 and 27 ①  
MIRL Rwy 5-23 and 9-27 ①THREE RIVERS, MICHIGAN  
Orig-A 10210

41°58'N - 85°36'W

THREE RIVERS MUNI DR. HAINES (HAI)  
**RNAV (GPS) RWY 27**

VOR/DME AZO 109.0 Chan 27	APP CRS 187°	Rwy Idg TDZE Apt Elev 824	N/A N/A 824
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VOR or GPS-A

THREE RIVERS MUNI DR. HAINES (HAI)



Use Kalamazoo altimeter setting; when not received, use South Bend altimeter setting.

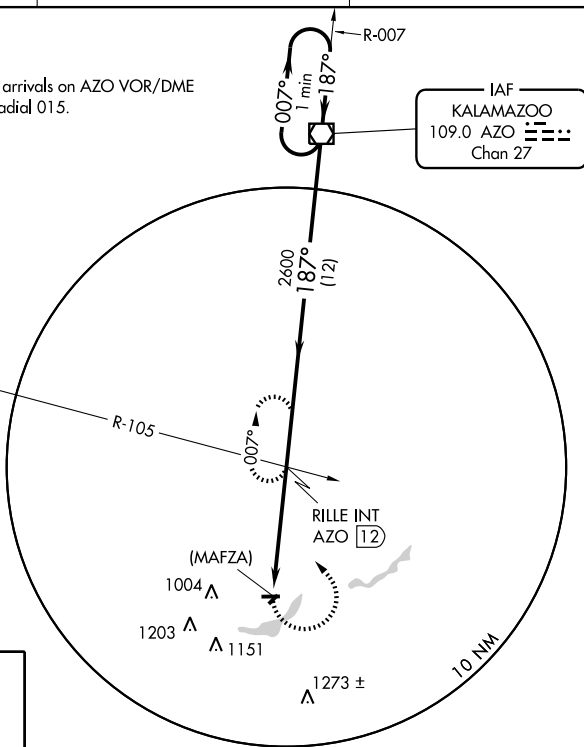
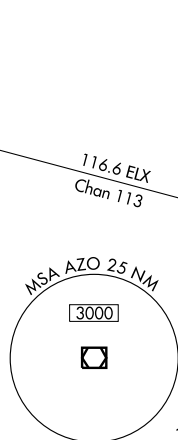
MISSED APPROACH: Climbing left turn to 2600 via AZO R-187 to RILLE Int and hold.

AWOS-3  
119.975

KALAMAZOO APP CON ★  
121.2 340.9

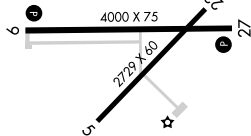
UNICOM  
122.8 (CTAF) 0

NoPT for arrivals on AZO VOR/DME  
Airway radial 015.



ELEV 824

187° 4.7 NM  
from FAF



REIL Rwy 9 and 27 0  
MIRL Rwy 5-23 and 9-27 0

FAF to MAP 4.7 NM

Knots	60	90	120	150	180
Min:Sec	4:42	3:08	2:21	1:53	1:34

THREE RIVERS, MICHIGAN  
Amdt 9A 10210

41°58'N - 85°36'W

THREE RIVERS MUNI DR. HAINES (HAI)

VOR or GPS-A

2600	RILLE INT	RILLE INT AZO 12	VOR/DME	One Minute Holding Pattern
AZO R-187 109.0			187°	007° → 2600
(MAFZA)		2600	← 187°	
4.7 NM	12 NM			
CATEGORY	A	B	C	D
CIRCLING	1320-1	496 (500-1)	1420-1½ 596 (600-1½)	NA
SOUTH BEND ALTIMETER SETTING MINIMUMS				
CIRCLING	1420-1	596 (600-1)	1520-1½ 696 (700-1½)	NA





**TRAVERSE CITY** N44°40.07' W85°33.00' NOTAM FILE TVC.

(H) VORTACW 114.6 TVC Chan 93

345° 4.6 NM to Cherry Capital. 912/2W. HIWAS.

VOR portion unusable 276°–334° byd 20 NM blo 5000'. VOR portion unusable 063°–157° byd 16 NM blo 2600'; 063°–157° byd 27 NM blo 5000'.

DME portion unusable 020°–335° byd 30 NM blo 3500'.

RCO 122.65 122.2 (LANSING RADIO)

GREEN BAY

H–2L, L–31B

## TRAVERSE CITY

**CHERRY CAPITAL** (TVC) 2 S UTC–5(–4DT) N44°44.50' W85°34.94'

624 B S4 FUEL 100LL, JET A LRA Class I, ARFF Index B NOTAM FILE TVC

RWY 10–28: H6500X150 (ASPH–PFC) S–90, D–130, 2S–165, 2D–240 HIRL

RWY 10: VASI(V4L)—GA 3.0° TCH 46'. Tree.

RWY 28: MALSR. PAPI(P4L)—GA 2.9° TCH 52'. Tower.

RWY 18–36: H5378X150 (ASPH–PFC) S–70, D–110, 2S–140, 2D–190 MIRL

RWY 18: VASI(V4L)—GA 3.0° TCH 50'. Thld dsplcd 270'. Trees.

RWY 36: REIL. VASI(V4L)—GA 3.0° TCH 50'. Tree.

### LAND AND HOLD SHORT OPERATIONS

LANDING	HOLD SHORT POINT	DIST AVBL
RWY 18	10–28	2850
RWY 28	18–36	5500

### RUNWAY DECLARED DISTANCE INFORMATION

RWY 10:	TORA–6500	TODA–6500	ASDA–6500	LDA–6500
RWY 18:	TORA–5379	TODA–5379	ASDA–5109	LDA–4839
RWY 28:	TORA–6500	TODA–6500	ASDA–6500	LDA–6500
RWY 36:	TORA–5379	TODA–5379	ASDA–5109	LDA–5109

**AIRPORT REMARKS:** Attended Oct–Apr 1200–0200Z†, May–Sep

1200–0300Z†. During hrs when arpt is unattended call arpt ops

231–313–0928 or FBO at 231–929–1126. Arpt CLOSED to unscheduled air carrier acft with over 30 passenger seats without 48 hour prior permission—call 231–947–2250. CAUTION: Birds and deer on and in/ov arpt. Twy C–1 east of Twy C not avbl to air carrier acft. Snow removal ops in progress winter months, Snow Command will be monitoring CTAF during non–twr hours. Acft ldg/departing TVC should announce their intentions on CTAF when twr clsd. Flt crews should read back all advisory information provided by Snow Command. Arpt surface conditions unmonitored btn 0600–0900Z†. ACTIVATE HIRL Rwy 10–28, MIRL Rwy 18–36, VASI Rwy 18 and MALSR Rwy 28 and REIL Rwy 36—CTAF. Ldg fee based on acft weight, private owned single engine acft exempt.

**WEATHER DATA SOURCES:** ASOS (231) 933–0401. HIWAS 114.6 TVC.

**COMMUNICATIONS:** CTAF 124.2 ATIS 119.175 UNICOM 122.95

TRAVERSE CITY RCO 122.65 122.2 (LANSING RADIO)

Ⓡ MINNEAPOLIS CENTER APP/DEP CON 132.9

TRAVERSE CITY TOWER 124.2 (1200–0200Z, 1100–0200Z EDT) GND CON 121.8

**AIRSPACE:** CLASS D svc (1200–0200Z, 1100–0200Z EDT) other times CLASS E.

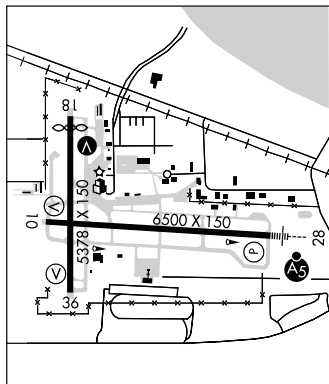
**RADIO AIDS TO NAVIGATION:** NOTAM FILE TVC.

TRAVERSE CITY (H) VORTACW 114.6 TVC Chan 93 N44°40.07' W85°33.00' 345° 4.6 NM to fld. 912/2W. HIWAS.

GWENN NDB (MH/LOM) 365 TV N44°44.07' W85°25.76' 279° 6.6 NM to fld. Unmonitored when twr clsd.

ILS 110.7 I–TVC Rwy 28. Class IE. LOM GWENN NDB. ILS and LOM unmonitored when twr clsd.

**COMM/NAV/WEATHER REMARKS:** Emerg frequency 121.5 not avbl at twr.



APP CRS **005°**  
Rwy Idg **5378**  
TDZE **624**  
Apt Elev **624**

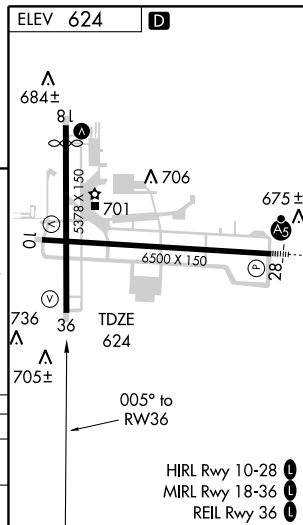
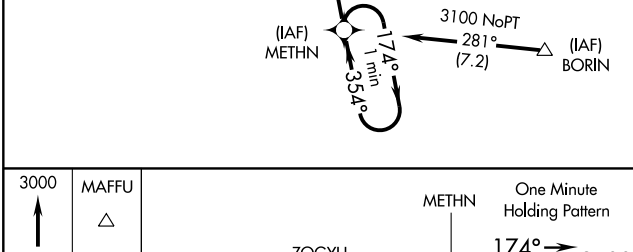
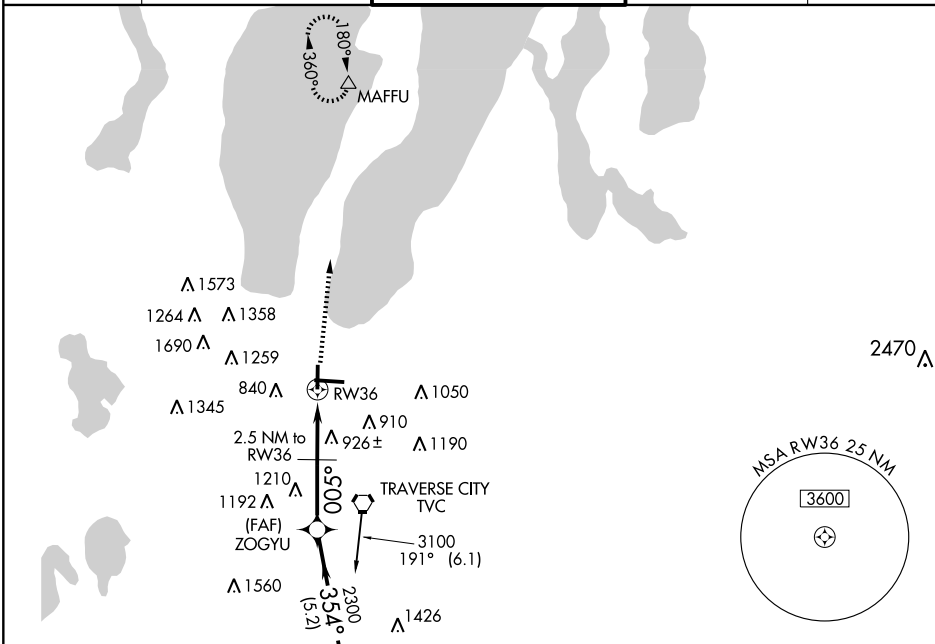
GPS RWY 36

TRAVERSE CITY / CHERRY CAPITAL (TVC)



MISSED APPROACH: Climb to 3000  
direct MAFFU WP and hold.

ATIS	MINNEAPOLIS CENTER	TRAVERSE CITY TOWER *	GND CON	UNICOM
<b>119.175</b>	<b>132.9 338.3</b>	<b>124.2(CTAF) 348.6</b>	<b>121.8 348.6</b>	<b>122.95</b>



CATEGORY	A	B	C	D
S-36	1180-1 556 (600-1)		1180-1½ 556 (600-1½)	1180-1¾ 556 (600-1¾)
CIRCLING	1180-1 556 (600-1)		1260-1¾ 636 (700-1¾)	1300-2¼ 676 (700-2¼)

LOC I-TVC <b>110.7</b>	APP CRS <b>279°</b>	Rwy Idg TDZE Apt Elev	<b>6500</b> <b>617</b> <b>624</b>
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ILS RWY 28

TRAVERSE CITY / CHERRY CAPITAL (TVC)

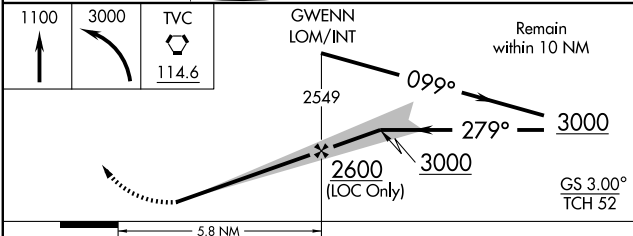
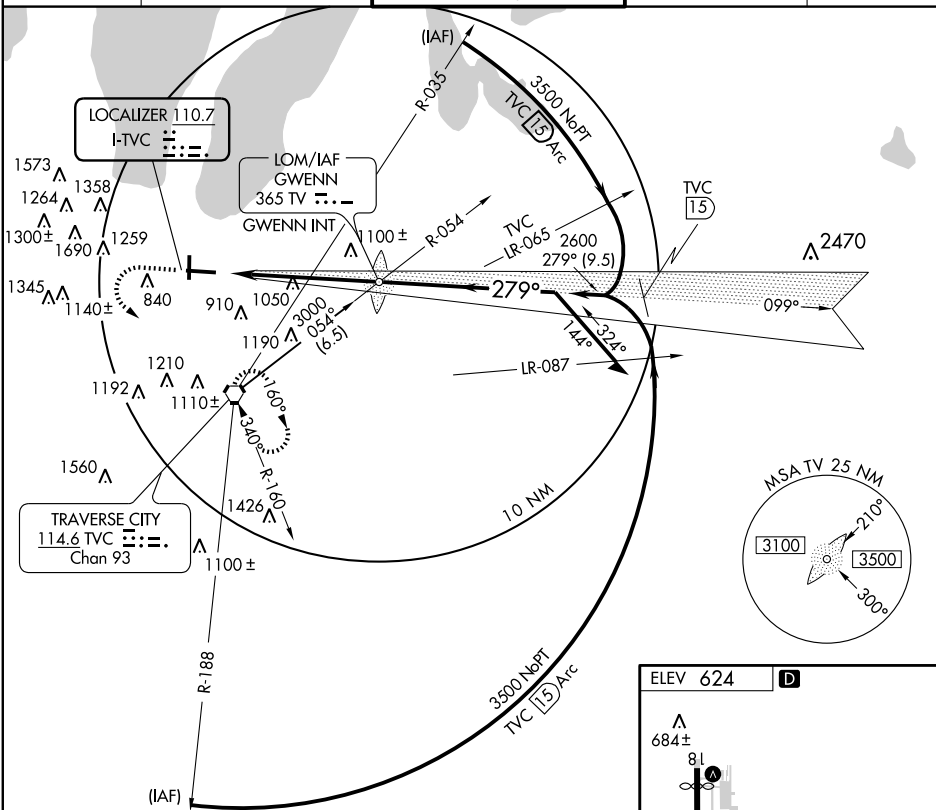


MALSR

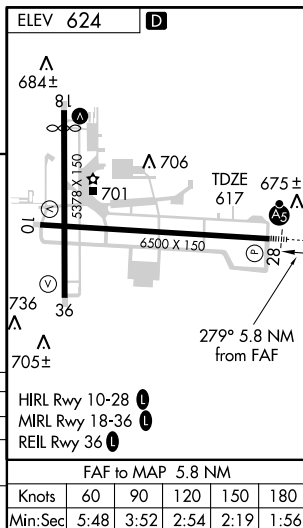


MISSED APPROACH: Climb to 1100 then climbing  
left turn to 3000 direct TVC VORTAC and hold.

ATIS <b>119.175</b>	MINNEAPOLIS CENTER <b>132.9 338.3</b>	TRAVERSE CITY TOWER ★ <b>124.2 (CTAF) 348.6</b>	GND CON <b>121.8 348.6</b>	UNICOM <b>122.95</b>
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CATEGORY	A	B	C	D
S-ILS 28		817-1/2	200 (200-1/2)	
S-LOC 28	1360-1/2 743 (800-1/2)	1360-3/4 743 (800-3/4)	1360-1 3/4 743 (800-1 3/4)	1360-2 743 (800-2)
CIRCLING	1360-1 736 (800-1)	1360-1 1/4 736 (800-1 1/4)	1360-2 1/4 736 (800-2 1/4)	1360-2 1/2 736 (800-2 1/2)



## LAND AND HOLD SHORT OPERATIONS (LAHSO)

LAHSO is an acronym for "Land and Hold Short Operations." These operations include landing and holding short of an intersection runway, an intersecting taxiway, or other predetermined points on the runway other than a runway or taxiway. Measured distance represents the available landing distance on the landing runway, in feet.

Specific questions regarding these distances should be referred to the air traffic manager of the facility concerned. The Aeronautical Information Manual contains specific details on hold-short operations and markings.

CITY/AIRPORT	LDG RWY	HOLD-SHORT POINT	MEASURED DISTANCE
BATTLE CREEK, MI W.K. KELLOGG (BTL)	05	13-31	7,000 feet
DETROIT, MI COLEMAN A. YOUNG MUNI (DET)	15	07-25	4,900 feet
FLINT, MI BISHOP INTL (FNT)	09 36	18-36 09-27	4,100 feet 6,300 feet
JACKSON, MI JACKSON COUNTY-REYNOLDS FIELD (JXN)	24	14-32	3,406 feet
TRAVERSE CITY, MI CHERRY CAPITAL (TVC)	18 28 28	10-28 18-36 18-36	2,850 feet 5,500 feet 5,500 feet

23 SEP 2010 to 21 OCT 2010

23 SEP 2010 to 21 OCT 2010

LOM TV <b>365</b>	APP CRS <b>279°</b>	Rwy Idg TDZE Apt Elev	<b>6500</b> <b>617</b> <b>624</b>
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# NDB or GPS RWY 28

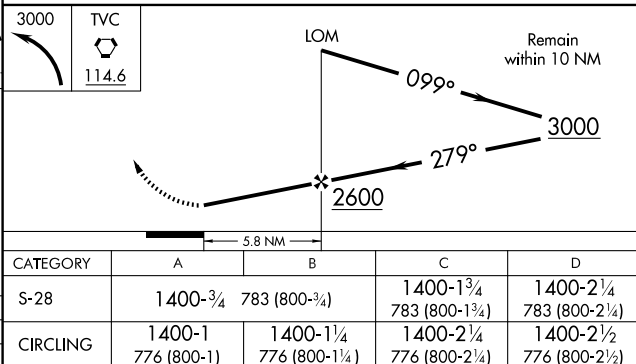
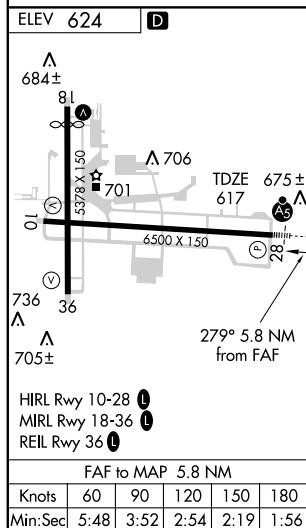
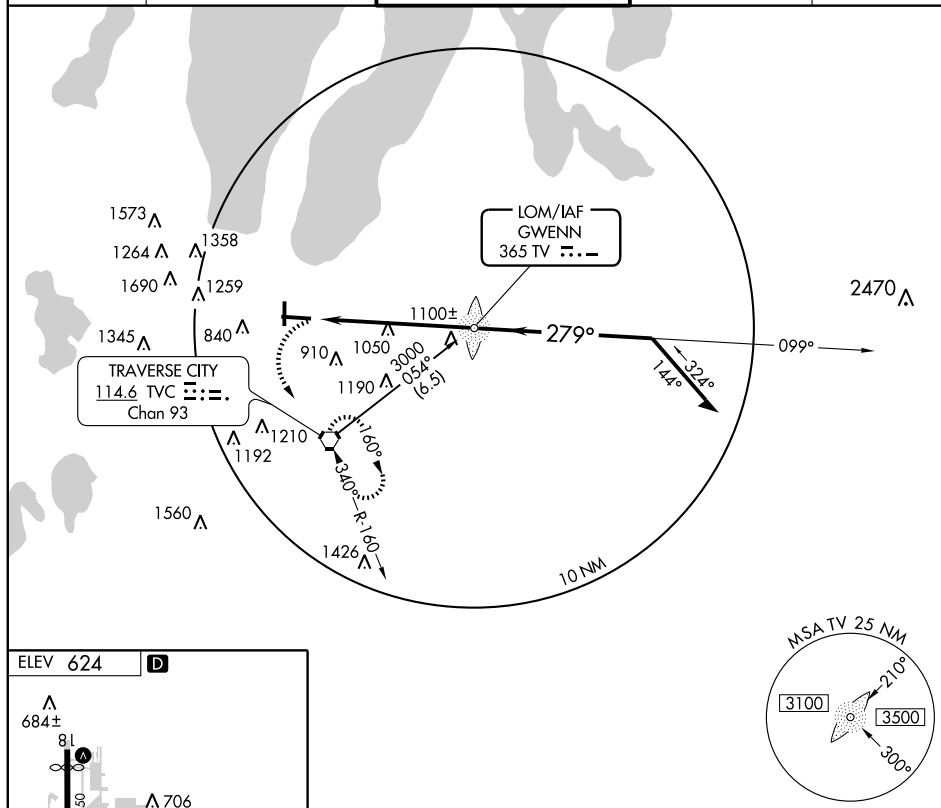
TRAVERSE CITY / CHERRY CAPITAL (TVC)

**▽** For inoperative MALSR increase  
**▲** Cat B S-28 visibility ½ mile.



MISSED APPROACH: Climbing left turn to 3000 direct TVC VORTAC and hold.

ATIS <b>119.175</b>	MINNEAPOLIS CENTER <b>132.9 338.3</b>	TRAVERSE CITY TOWER ★ <b>124.2(CTAF) 348.6</b>	GND CON <b>121.8 348.6</b>	UNICOM <b>122.95</b>
------------------------	--	---	-------------------------------	-------------------------



WAAS CH <b>42610</b> <b>W10A</b>	APP CRS <b>099°</b>	Rwy Idg <b>6500</b> TDZE <b>624</b> Apt Elev <b>624</b>
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# RNAV (GPS) RWY 10

TRAVERSE CITY / CHERRY CAPITAL (TVC)

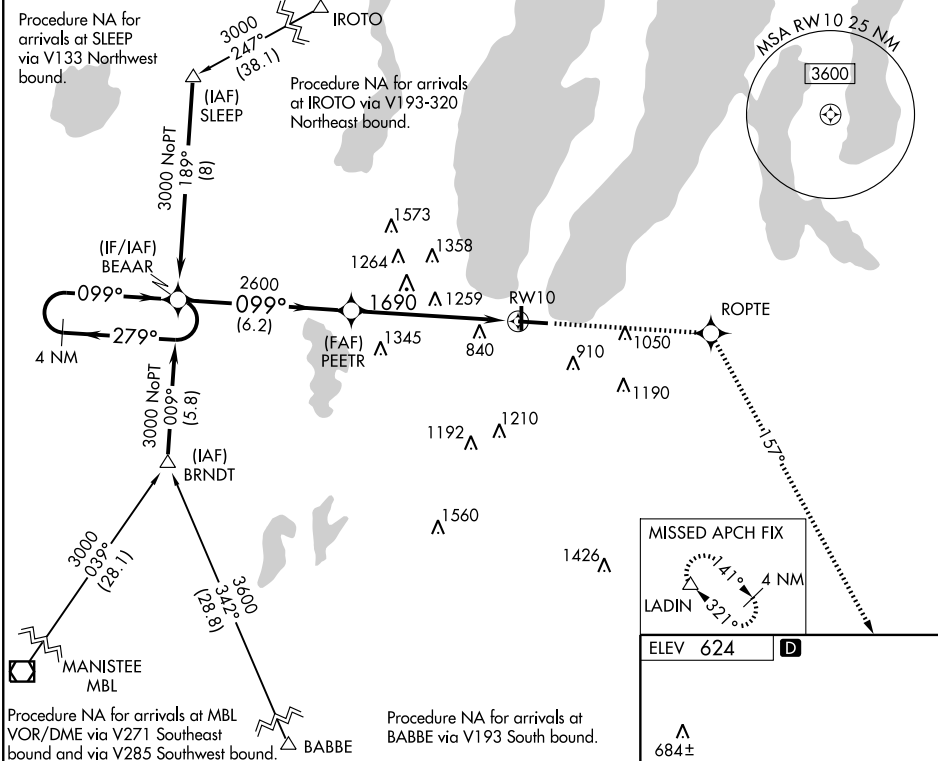
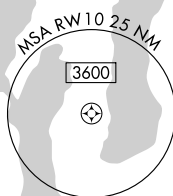
**⚠** DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.  
**⚠** When local altimeter setting not received, use Bellaire altimeter setting and increase DA 51 feet and all MDA 60 feet, increase LPV all Cats. visibility ¼ mile. VDP NA when using Bellaire altimeter setting.

MISSED APPROACH: Climb to 4000 direct ROPTE and via 157° track to LADIN and hold.

ATIS <b>119.175</b>	MINNEAPOLIS CENTER <b>132.9 338.3</b>	TRAVERSE CITY TOWER* <b>124.2 (CTAF) 0 348.6</b>	GND CON <b>121.8 348.6</b>	UNICOM <b>122.95</b>
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Procedure NA for arrivals at SLEEP via V133 Northwest bound.

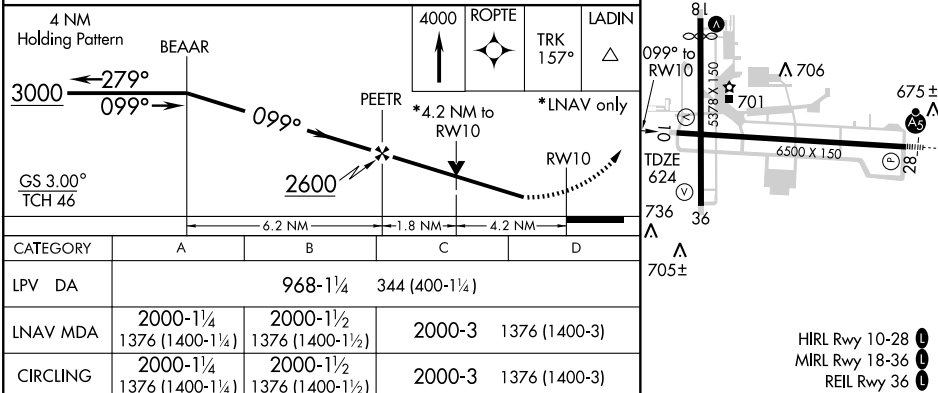
Procedure NA for arrivals at IROTO via V193-320 Northeast bound.



MANISTEE MBL

Procedure NA for arrivals at MBL VOR/DME via V271 Southeast bound and via V285 Southwest bound.

Procedure NA for arrivals at BABBE via V193 South bound.



VORTAC TVC <b>114.6</b> Chan <b>93</b>	APP CRS <b>340°</b>	Rwy Idg TDZE Apt Elev	<b>N/A</b> <b>N/A</b> <b>624</b>
--	------------------------	-----------------------------	--

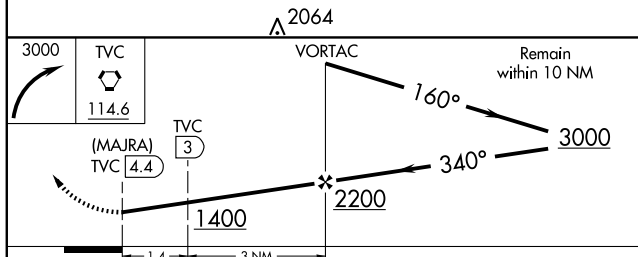
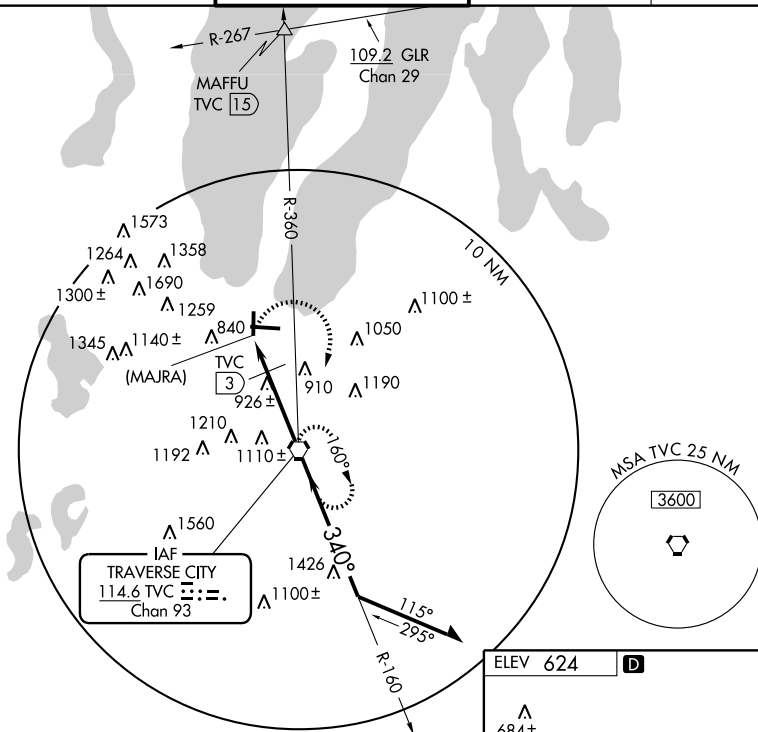
## VOR or TACAN or GPS-A

TRAVERSE CITY / CHERRY CAPITAL (TVC)

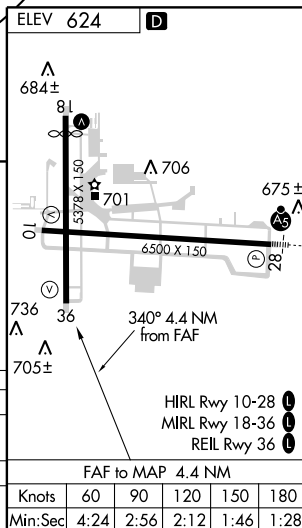


MISSED APPROACH: Climbing right turn to 3000 direct TVC  
VORTAC and hold. (TACAN aircraft climbing right turn to 3500  
via TVC R-360 to MAFFU/Int 15 DME and hold N, RT, 180° inbound.)

ATIS <b>119.175</b>	MINNEAPOLIS CENTER <b>132.9 338.3</b>	TRAVERSE CITY TOWER ★ <b>124.2 (CTAF) 348.6</b>	GND CON <b>121.8 348.6</b>	UNICOM <b>122.95</b>
------------------------	--	--	-------------------------------	-------------------------



CATEGORY	A	B	C	D
CIRCLING	1400-1 776 (800-1)	1400-1¼ 776 (800-1¼)	1400-2¼ 776 (800-2¼)	1400-2½ 776 (800-2½)
DME MINIMUMS				
CIRCLING	1300-1 676 (700-1)	1300-2 676 (700-2)	1300-2¼ 676 (700-2¼)	1300-2½ 676 (700-2½)



**SUGAR LOAF RESORT** (Y04) 14 NW UTC-5(-4DT) N44°54.75' W85°48.84'

825 NOTAM FILE LAN

RWY 02-20: H3519X50 (ASPH)

RWY 02: Trees. RWY 20: Thld dsplcd 572'. Trees.

**AIRPORT REMARKS:** Unattended. Day ops only. No snow removal. Ski hill adjacent to rwy NW side. Adjacent ski facility CLOSED. +10' hill on each side of rwy, 10' from pavement edges in midsection of rwy. Pedestrians and golf course adjacent to rwy N end, pedestrians and equipment crossing rwy.

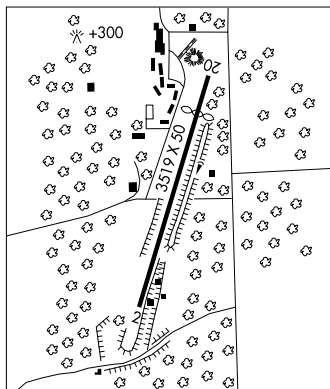
**WEATHER DATA SOURCES:** HIWAS 114.6 TVC.

**COMMUNICATIONS:** CTAF 122.9

**RADIO AIDS TO NAVIGATION:** NOTAM FILE TVC.

TRAVERSE CITY (H) VORTACW 114.6 TVC Chan 93 N44°40.07'

W85°33.00' 325° 18.5 NM to fld. 912/2W. HIWAS



**TRIBE** N45°03.70' W87°41.76' NOTAM FILE MNM.

NDB (LOM) 239 TN 035°4.6 NM to Menominee-Marquette Twin Co.

GREEN BAY

**TRIPLE H** (See PARCHMENT)

**TRIPP CREEK** (See ST JOHNS)

## TROY

**OAKLAND/TROY** (VLL) 2 E UTC-5(-4DT) N42°32.58' W83°10.67'

727 B FUEL 100LL, JET A TPA-1727(1000) NOTAM FILE LAN

RWY 09-27: H3549X60 (ASPH) MIRL 0.7% up W

RWY 09: PAPI(P2R)-GA 4.0° TCH 30'. P-line.

RWY 27: PAPI(P2L)-GA 4.0° TCH 31'. Building.

**AIRPORT REMARKS:** Attended Sep-May Mon-Fri 1300-2300Z± Sat-Sun 1300-2300Z±, Jun-Aug Mon-Fri 1300-0100Z±, Sat-Sun 1300-2300Z±. Deer and birds on and in vof arpt. No touch and go landings or practice traffic patterns. Rwy 09 +3' berm 316' from thld. ACTIVATE MIRL Rwy 09-27 and PAPI Rwy 09 and Rwy 27-CTAF.

**WEATHER DATA SOURCES:** AWOS-3 119.475 (248) 288-4649.

**COMMUNICATIONS:** CTAF/UNICOM 123.05

® DETROIT APP/DEP CON 126.85 CLNC DEL 121.725

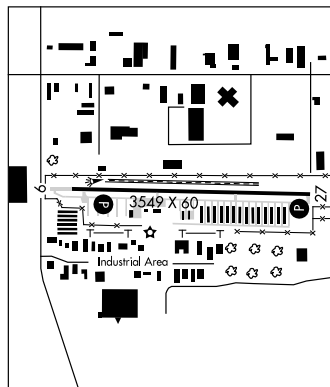
**RADIO AIDS TO NAVIGATION:** NOTAM FILE PTK.

PONTIAC (L) VORTAC 111.0 PSI Chan 47 N42°42.05'

W83°31.97' 124° 18.4 NM to fld. 1148/3W.

**COMM/NAV/WEATHER REMARKS:** For CLNC DEL key frequency 121.725 4 times. To contact FSS key freq 121.725 6 times. One second on/one second off; monitor 121.725 while electronic equipments dials Detroit CLNC DEL/Lansing FSS.

DETROIT  
COPTER  
L-28J, A  
IAP



**TULIP CITY** (See HOLLAND)

**TUSCOLA AREA** (See CARO)

**UNIVERSITY AIRPARK** (See BATH)

**VAN CAMP'S HELIPORT** (See TECUMSEH)

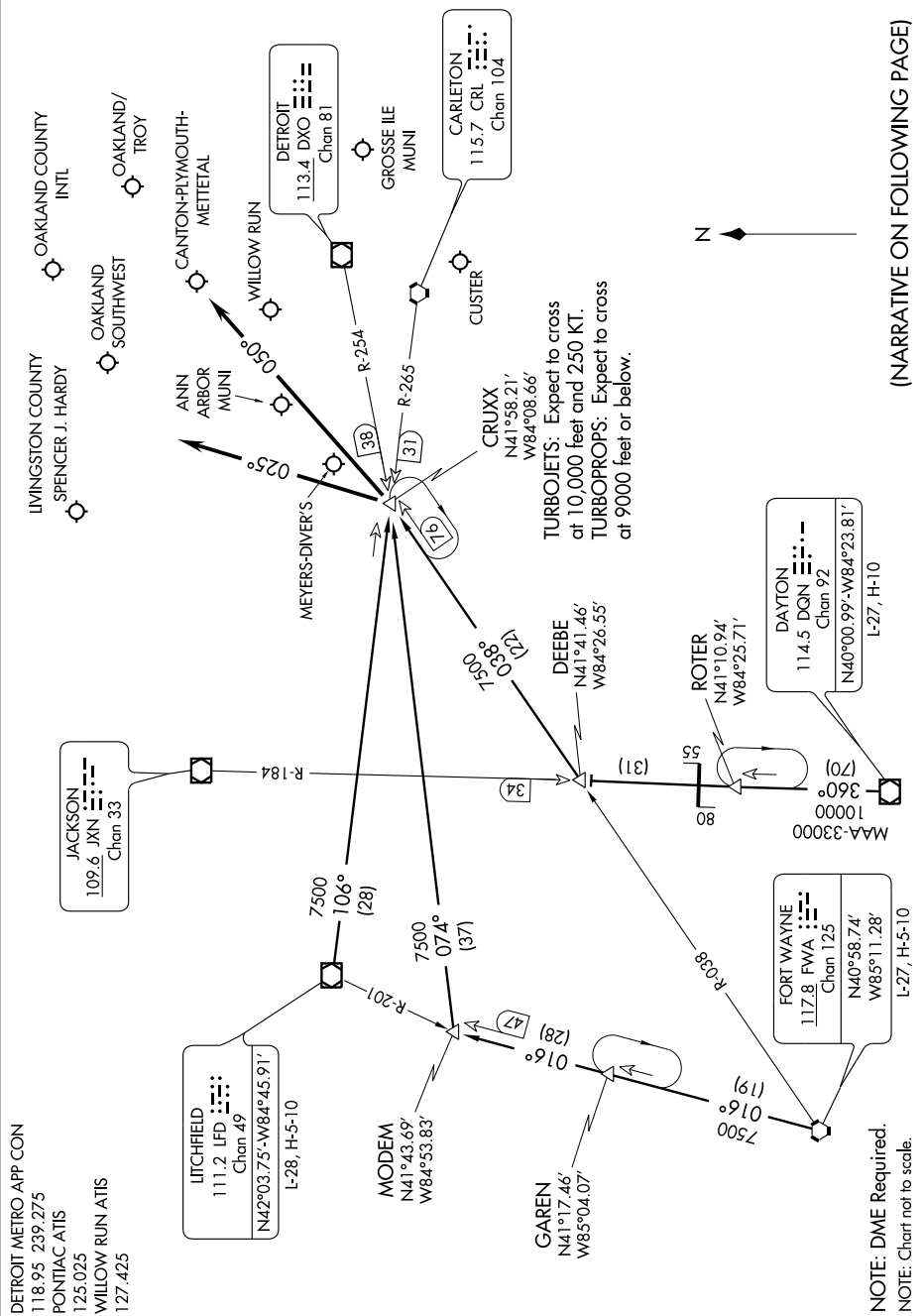
**VAN WAGNEN** (See NAPOLEON)



## CRUXX FOUR ARRIVAL

DETROIT, MICHIGAN

EC-1, 23 SEP 2010 to 21 OCT 2010



## CRUXX FOUR ARRIVAL

(CRUXX.CRUXX4) 10210

DETROIT, MICHIGAN

EC-1, 23 SEP 2010 to 21 OCT 2010

## CRUXX FOUR ARRIVAL (CRUXX.CRUX4)

DETROIT, MICHIGAN

## ARRIVAL DESCRIPTION

DAYTON TRANSITION (DQN.CRUX4): From over DQN VOR/DME via DQN R-360 and JXN R-184 to DEEBE INT and FWA R-038 to CRUXX INT. Thence . . . .

FORT WAYNE TRANSITION (FWA.CRUX4): From over FWA VORTAC via FWA R-016 to MODEM INT and DXO R-254 to CRUXX INT. Thence . . . .

LITCHFIELD TRANSITION (LFD.CRUX4): From over LFD VORTAC via LFD R-106 to CRUXX INT. Thence . . . .

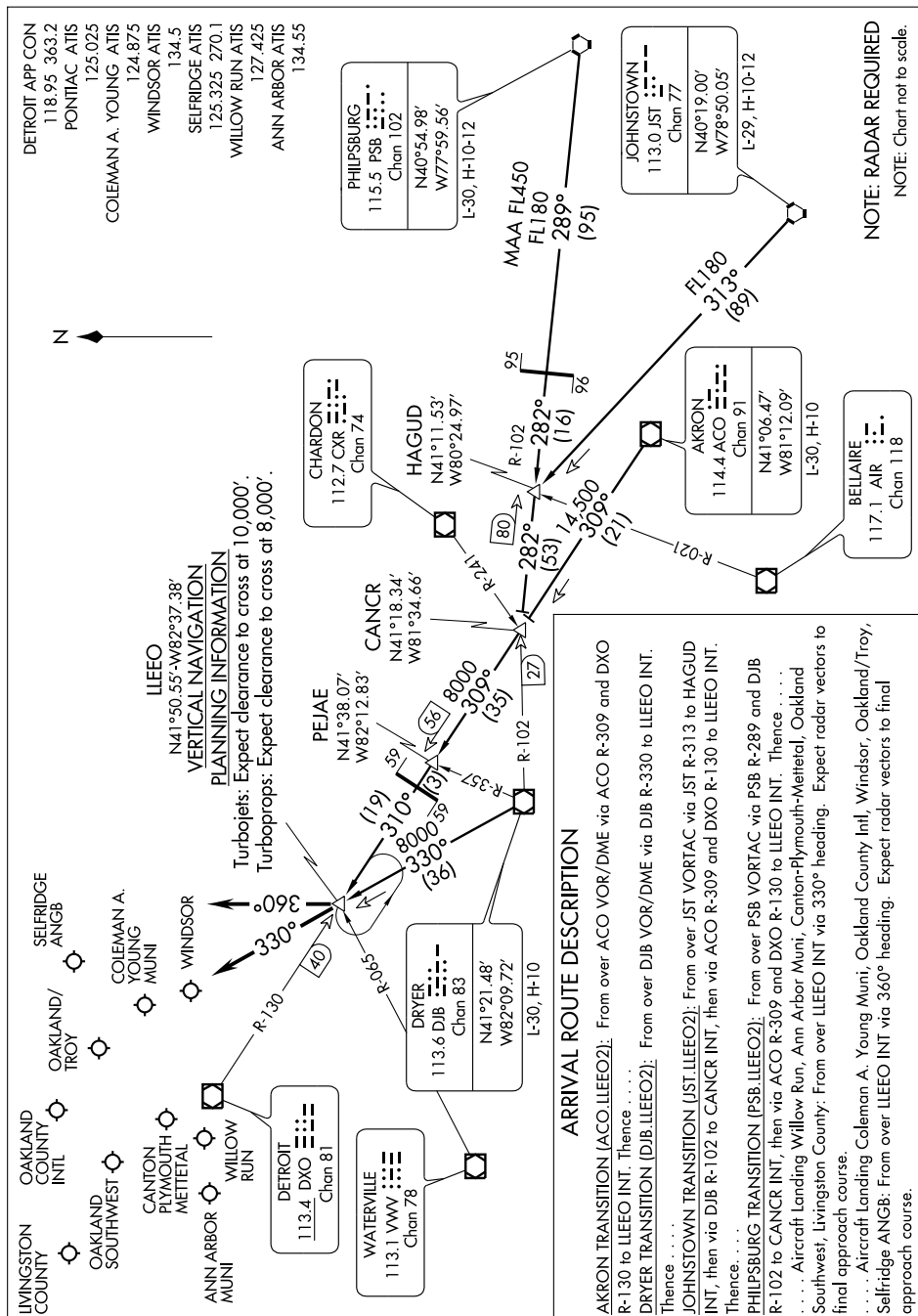
. . . . Aircraft landing Y47, PTK, 0MI7, ØZW, ONZ, 1D2, TTF, VLL: From over CRUXX INT via 025° heading.

. . . . Aircraft landing YIP or ARB: From over CRUXX INT via 050° heading. Expect radar vector to final approach course.

EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1, 23 SEP 2010 to 21 OCT 2010

## LEEO TWO ARRIVAL



EC-1, 23 SEP 2010 to 21 OCT 2010

EC-1 23 SEP 2010 to 21 OCT 2010

## LEEO TWO ARRIVAL

(LLEO.LLEO2) 09127

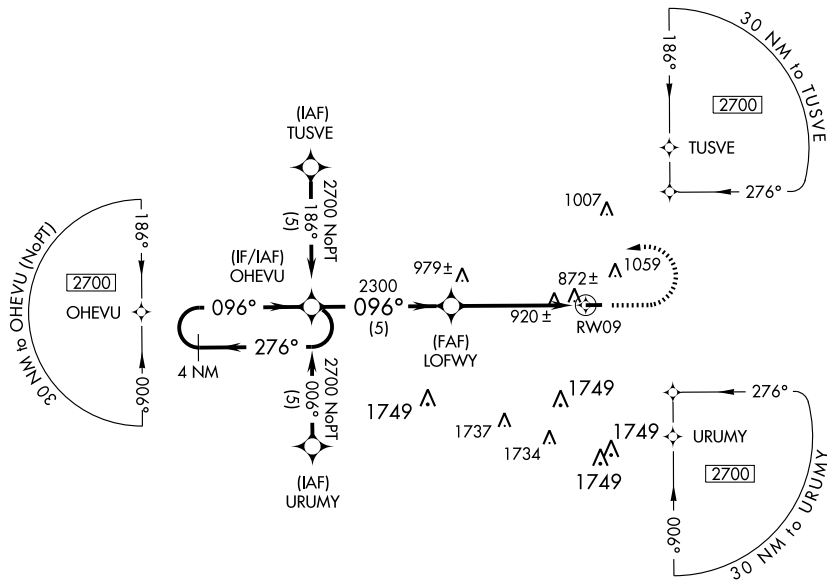
DETROIT, MICHIGAN

## RNAV (GPS) RWY 9

TROY / OAKLAND/TROY (VLL)

APP CRS  
**096°**Rwy Idg **3549**  
TDZE **729**  
Apt Elev **729**

DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 2200 then climbing  
left turn to 2700 direct OHEVU WP and hold.AWOS-3  
**119.475**DETROIT APP CON  
**126.85 363.2**CLNC DEL  
**121.725**UNICOM  
**123.05 (CTAF) 0**

ELEV 729

4 NM  
Holding Pattern OHEVU

2700

276°

096°

OHEVU

096°

LOFWY

2300

3.07°

TCH 40

RW09

0.7% UP

3549 X 60

TDZE 729

VGSI and descent  
angles not coincident.

5 NM

4.8 NM

CATEGORY

A

B

C

D

GLS PA DA

NA

LNAV/  
VNAV DA

NA

LNAV MDA

1260-1 531 (600-1)

1260-1½  
531 (600-1½)

NA

CIRCLING

1400-1 671 (700-1)

1400-2  
671 (700-2)

NA

MIRL Rwy 9-27 0

(SPRTN.SPRTN3) 10210

ST-118 (FAA)

## SPRTN THREE ARRIVAL

DETROIT, MICHIGAN

DETROIT APP CON

127.5 239.275

WILLOW RUN ATIS 127.425

PONTIAC ATIS 125.025

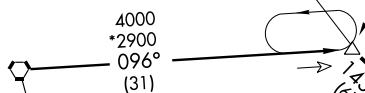
COLEMAN A. YOUNG ATIS 124.875

WINDSOR ATIS 134.5

SELFREDGE ATIS 125.325 270.1

SPRTN

N42°42.52'-W84°00.23'

VERTICAL NAVIGATION  
PLANNING INFORMATIONTURBOJETS/TURBOPROPS:  
Expect clearance to cross at  
9000'.LIVINGSTON COUNTY  
SPENCER J. HARDYPARKY  
N42°38.16'  
W83°54.57'

ANN ARBOR MUNI

DETROIT  
113.4 DXO  
Chan 81

MEYERS-DIVER'S

FLINT  
116.9 FNT  
Chan 116PONTIAC  
111.0 PSI  
Chan 47

ROMEO STATE

OAKLAND COUNTY  
INTLSELFREDGE  
ANG BASEOAKLAND/  
TROYCOLEMAN A.  
YOUNG MUNICANTON-  
PLYMOUTH-  
METTETAL

WINDSOR

GROSSE ILE  
MUNI

CLUSTER

NOTE: This Star for use at  
or above 9,000'.

NOTE: Chart not to scale.

EC-1, 23 SEP 2010 to 21 OCT 2010

LANSING TRANSITION (LAN.SPRTN3): From over LAN VORTAC via LAN R-096  
to SPRTN INT. Thence . . . .. . . . Aircraft landing: DET, PTK, VLL, D98, MTC, ARB, YIP, ONZ,  
1D2, TTF, Y47, 36MI, OZW, 3TE, YQG: From over SPRTN INT via DXO R-323  
to PARKY INT. Thence . . . .

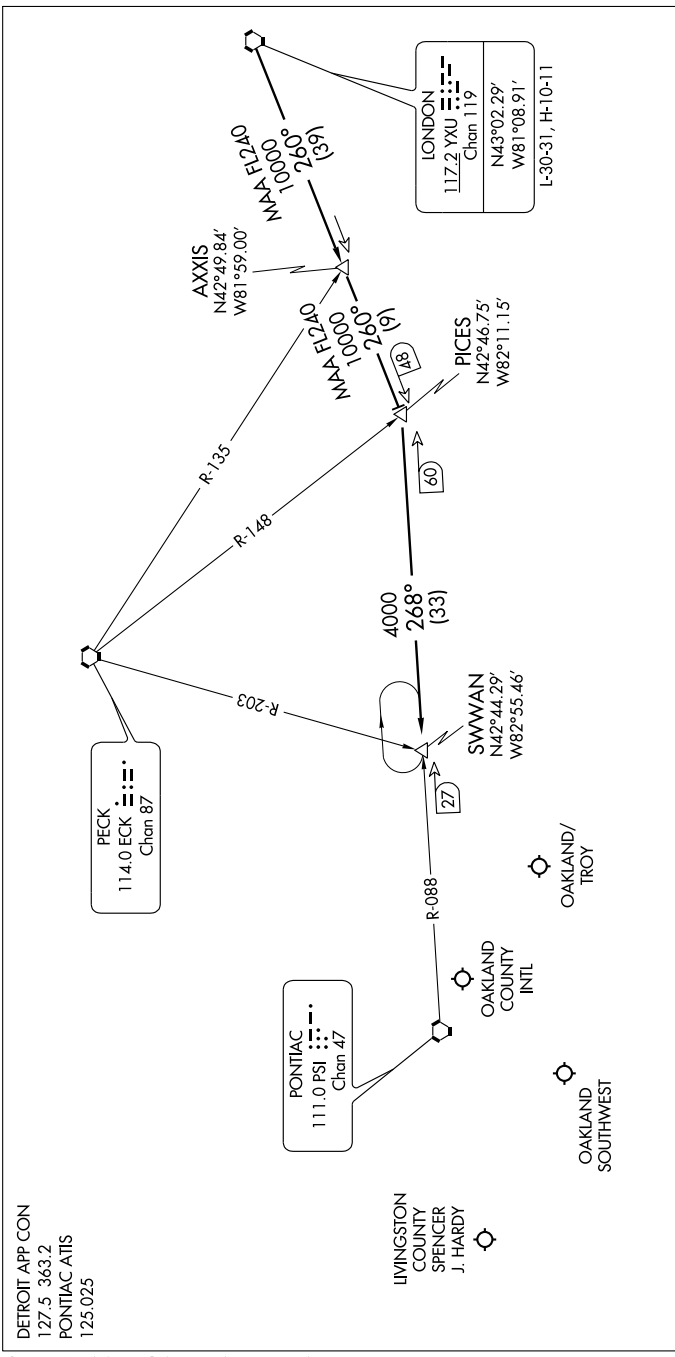
. . . . Expect radar vectors to final approach course.

## SPRTN THREE ARRIVAL

DETROIT, MICHIGAN

(SPRTN.SPRTN3) 10210

EC-1, 23 SEP 2010 to 21 OCT 2010



ARRIVAL ROUTE DESCRIPTION

LONDON TRANSITION (YXU.SWWAN1): From over YXU VORTAC via YXU R-260 to PICES INT, then via PSI R-088 to SWWAN INT. Thence . . . .

. . . . From SWWAN, expect radar vectors to final approach course.

NOTE: RADAR Required.  
NOTE: Chart not to scale.

EC-1, 23 SEP 2010 to 21 OCT 2010

VORTAC PSI  
**111.0**  
Chan **47**

APP CRS  
**124°**

Rwy Idg  
TDZE  
Apt Elev

**N/A**  
**N/A**  
**729**

**VOR or GPS-A**  
TROY / OAKLAND/TROY (VLL)



NA

Circling to Rwy 9 NA at night. Visibility reduction by helicopters NA. Use Coleman A. Young Muni altimeter setting.

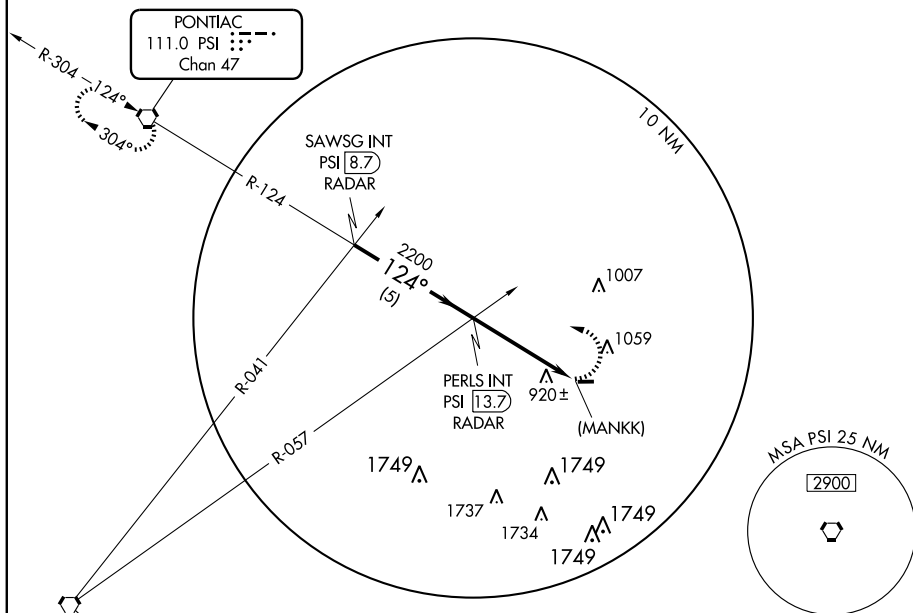
MISSED APPROACH: Climbing left turn to 3000 direct PSI VORTAC and hold.

AWOS-3  
**119.475**

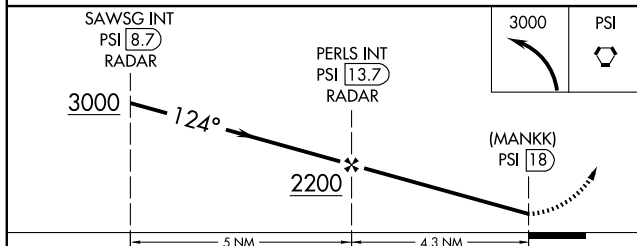
DETROIT APP CON  
**126.85 363.2**

CLNC DEL  
**121.725**

UNICOM  
**123.05** (CTAF) **0**

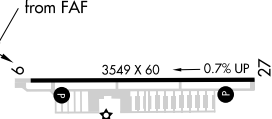


## RADAR REQUIRED



ELEV 729

124° 4.3 NM from FAF



CATEGORY

A

B

C

D

CIRCLING

1400-1 671 (700-1)

1400-2 671 (700-2)

NA

FAF to MAP 4.3 NM

Knots 60 90 120 150 180

Min:Sec 4:18 2:52 2:09 1:43 1:26

208

MICHIGAN

WATERVLIT MUNI

(40C) 1 NE UTC−5(−4DT) N42°12.00′ W86°15.00′

CHICAGO

656 NOTAM FILE LAN

RWY 02–20: 2600X200 (TURF)

RWY 02: Thld dsplcd 603′. Trees. RWY 20: Thld dsplcd 771′. Trees.

RWY 07–25: 1975X200 (TURF) (LOCAL USE ONLY)

RWY 07: Trees. RWY 25: Trees.

AIRPORT REMARKS: Unattended. Ultralight activity. Rwy 02–20 and Rwy 07–25 soft when wet and during spring; Rwys have poor drainage. Rwy 02–20 and dsplcd thld marked with 3′ yellow cones. Rwy 07–25 defined by mowing.

COMMUNICATIONS: CTAF 122.9

WAYLAND

CALKINS FLD

(41C) 1 N UTC−5(−4DT) N42°41.50′ W85°38.75′

CHICAGO

740 NOTAM FILE LAN

RWY 01–19: 2200X75 (TURF)

RWY 01: Thld dsplcd 800′. Building. RWY 19: Tree.

RWY 09–27: 1800X100 (TURF)

RWY 09: Thld dsplcd 200′. Trees. RWY 27: Tree.

AIRPORT REMARKS: Unattended. No snow removal—verify conditions call 616–889–5971 (manager’s cell) or 616–813–8903 (Asst mgr). Rwy 09–27 surface rough and uneven, soft when wet. Rwy 01–19 local use only. Rwy 09–27 and Rwy 01–19 and dsplcd thlds marked with 3′ yellow cones.

COMMUNICATIONS: CTAF 122.9

WEIDMAN

OJIBWA AIRPARK

(D11) 3NW UTC−5(−4DT) N43°43.20′ W85°00.17′

CHICAGO

950 NOTAM FILE LAN

RWY 05–23: 3600X125 (TURF) LIRL

RWY 05: Thld dsplcd 700′. Road. RWY 23: Thld dsplcd 400′. Trees.

AIRPORT REMARKS: Attended Apr–Nov irregularly. Arpt CLOSED when snow covered except ski equipped acft; approximately Nov thru Apr. Rwy 05 has 14′ road and 3′ fence at thld, and tall trees all quads. Rwy 23 E 400′ is soft when wet. Trees both sides of rwy. Rwy 05 and Rwy 23 marked with 3′ yellow cones.

COMMUNICATIONS: CTAF 122.9

WELKE

(See BEAVER ISLAND)

WELLS

(See ROCKFORD)

WEND VALLEY

(See CHARLOTTE)

WEST BRANCH COMMUNITY

(Y31) 3 SE UTC−5(−4DT) N44°14.69′ W84°10.79′

LAKE HURON

883 B S4 FUEL 100LL, JET A NOTAM FILE LAN

RWY 09–27: H5000X100 (ASPH) S–26 MIRL 0.4% up W

RWY 09: REIL. PAPI(P4L)—GA 3.0° TCH 41′. Trees. RWY 27: REIL. PAPI(P4L)—GA 3.0° TCH 41′. Trees.

AIRPORT REMARKS: Attended Mon–Fri 1300–2200Z‡, Sat–Sun 1400–2200Z‡. For attendant after hrs call 989–345–3524; svc charge. Deer on and invof arpt. ACTIVATE MIRL Rwy 09–27; PAPI and REIL Rwys 09 and 27—CTAF.

COMMUNICATIONS: CTAF/UNICOM 122.8

RCO 122.35 (LANSING RADIO)

MINNEAPOLIS CENTER APP/DEP CON 125.475

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

(T)VORW/DME 113.2 BXZ Chan 79 N44°14.57′ W84°11.03′ at fld. 884/6W.

DME unusable 020°–205° byd 19 NM blo 3000′, 205°–020° byd 19 NM blo 3500′.

WESTPHALIA

FOREST HILL

(3F5) 6SE UTC−5(−4DT) N42°54.74′ W84°40.53′

DETROIT

775 NOTAM FILE LAN

RWY 09–27: 2070X80 (TURF)

RWY 09: Trees. RWY 27: Trees.

RWY 18–36: 1900X80 (TURF)

RWY 18: Thld dsplcd 185′. Road. RWY 36: Thld dsplcd 380′. Tree.

AIRPORT REMARKS: Unattended. Deer and birds on and invof arpt. Rwy 09–27 and Rwy 18–36 soft in spring. Rwy 09 has a 30′ p–line in apch 606′ from thld. Rwy 09–27 and Rwy 18–36 edges and dsplcd thlds marked with 3′ yellow cones.

COMMUNICATIONS: CTAF 122.9

WEXFORD CO

(See CADILLAC)



APP CRS **095°**  
Rwy Idg **5000**  
TDZE **877**  
Apt Elev **882**

# RNAV (GPS) RWY 9

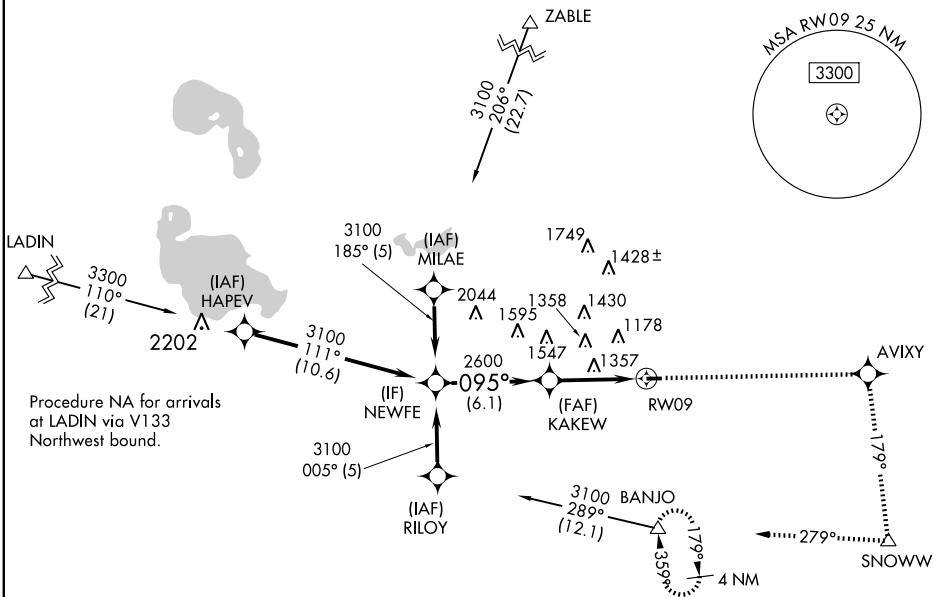
WEST BRANCH COMMUNITY (Y31)

**⚠** DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Saginaw Intl altimeter setting and increase all MDA 140 feet, increase LNAV Cat A visibility ¼ mile and Cat C/D ½ mile, increase Circling Cat A visibility ¼ mile and Cat C/D ½ mile.

**MISSED APPROACH:** Climb to 4000 direct AVIXY and via track 179° to SNOWWW and via track 279° to BANJO and hold.

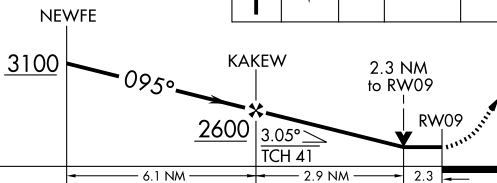
MINNEAPOLIS CENTER  
**125.475 269.45**

UNICOM  
**122.8 (CTAF) 0**



Procedure  
Turn  
NA

4000	AVIXY	SNOWWW	BANJO
↑	✱	△	△
TRK 179°		TRK 279°	



ELEV 882



CATEGORY	A	B	C	D
LNAV MDA	1660-1 783 (800-1)	1660-1¼ 783 (800-1¼)	1660-2¼ 783 (800-2¼)	1660-2½ 783 (800-2½)
CIRCLING	1660-1 778 (800-1)	1660-1¼ 778 (800-1¼)	1660-2¼ 778 (800-2¼)	1660-2½ 778 (800-2½)

REIL Rwy 9 and 27 **0**  
MIRL Rwy 9-27 **0**

APP CRS **275°**  
Rwy Idg **5000**  
TDZE **877**  
Apt Elev **882**

# RNAV (GPS) RWY 27

WEST BRANCH COMMUNITY (Y31)

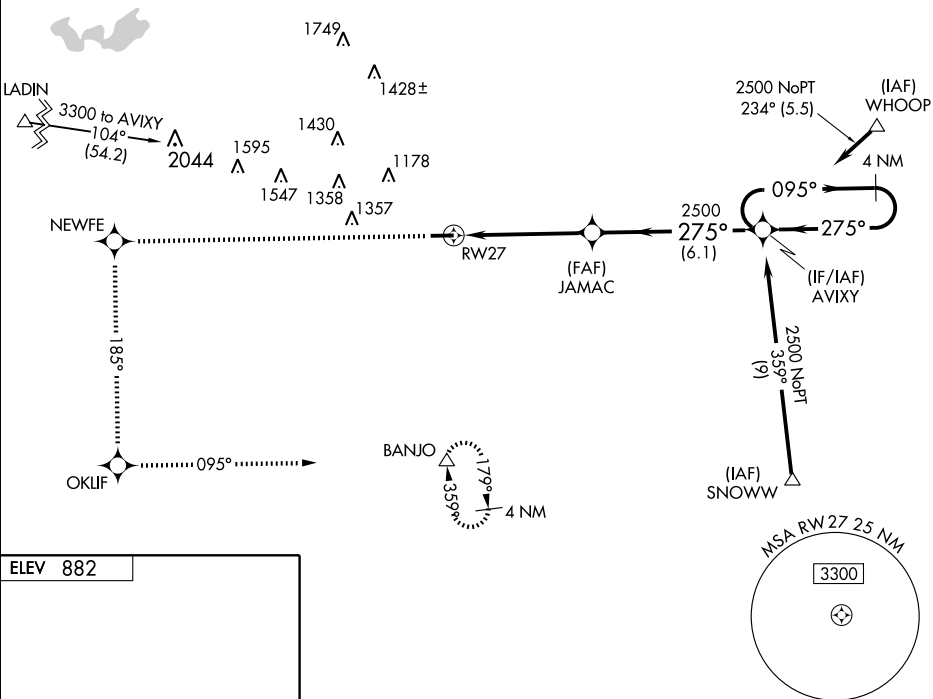
**▼** DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Saginaw Intl altimeter setting and increase all MDA 140 feet, increase LNAV visibility Cat C/D ¼ mile and Circling Cat C/D visibility ½ mile.

**MISSED APPROACH:** Climb to 4000 direct NEWFE and via track 185° to OKUF and via track 095° to BANJO and hold.

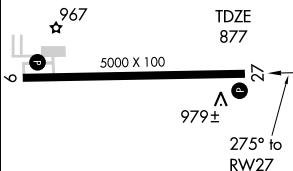
MINNEAPOLIS CENTER  
**125.475 269.45**

UNICOM  
**122.8 (CTAF) 0**

Procedure NA for arrivals at LADIN via V133 Northwest bound.



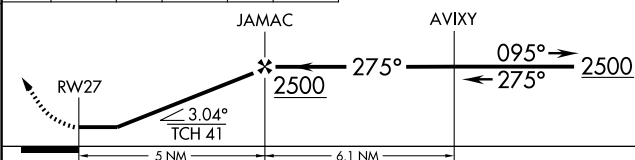
ELEV 882



REIL Rwy 9 and 27 **0**  
MIRL Rwy 9-27 **0**

4000	NEWFE	TRK 185°	OKUF	TRK 095°	BANJO
------	-------	----------	------	----------	-------

4 NM  
Holding Pattern



CATEGORY	A	B	C	D
LNAV MDA	1240-1	363 (400-1)	1240-1½	363 (400-1½)
CIRCLING	1480-1	598 (600-1)	1480-1½	1520-2
			598 (600-1½)	638 (700-2)

VOR/DME BXZ	APP CRS	Rwy Idg	<b>5000</b>
<b>113.2</b>	<b>269°</b>	TDZE	<b>877</b>
Chan <b>79</b>		Apt Elev	<b>883</b>

**VOR RWY 27**

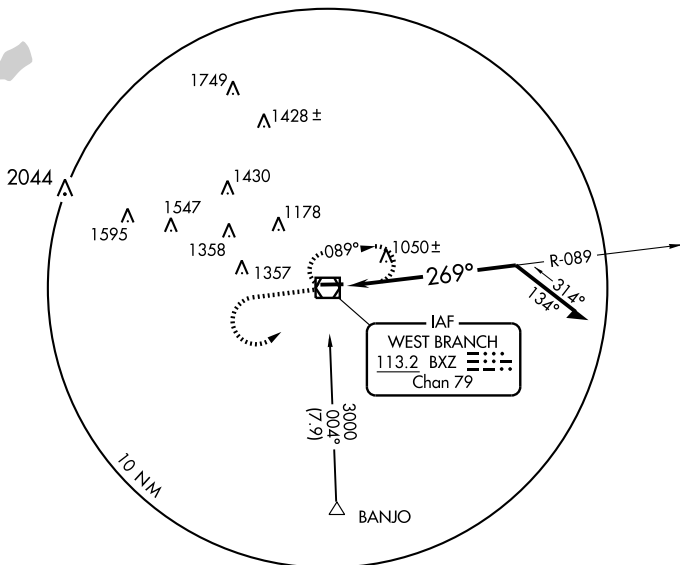
WEST BRANCH COMMUNITY (Y31)

**NA** When local altimeter setting not received, use Saginaw Intl altimeter setting and increase all MDA 140 feet, increase S-27 and Circling Cat C and D visibility ½ mile. Visibility reduction by helicopters NA.

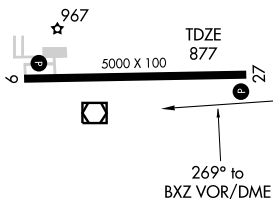
**MISSED APPROACH:** Climb to 2000 then climbing left turn to 2600 direct BXZ VOR/DME and hold.

MINNEAPOLIS CENTER  
**125.475 269.45**

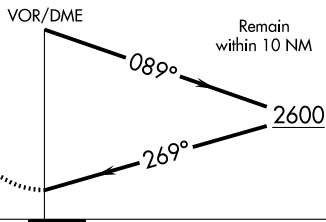
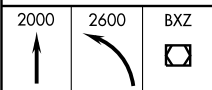
UNICOM  
**122.8 (CTAF) 0**



ELEV 883



MIRL Rwy 9-27 0  
REIL Rws 9 and 27 0



CATEGORY	A	B	C	D
S-27	1360-1	483 (500-1)	1360-1¼ 483 (500-1¼)	1360-1½ 483 (500-1½)
CIRCLING	1480-1	597 (600-1)	1480-1½ 597 (600-1½)	1520-2 637 (700-2)

WEST BRANCH, MICHIGAN  
Orig-E 29JUL10

44°15'N - 84°11'W

WEST BRANCH COMMUNITY (Y31)

**VOR RWY 27**